### UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF FLORIDA

Case No.

ELLEN BERMAN and DAYANA GUACH on behalf of themselves and all others similarly situated,

Plaintiffs,

v.

GENERAL MOTORS LLC, a Delaware limited liability company,

### **CLASS ACTION COMPLAINT**

**Demand for Jury Trial** 

Defendant.

Plaintiffs Ellen Berman and Dayana Guach (collectively, "Plaintiffs"), acting on behalf of themselves and all others similarly situated, bring this action for damages and equitable relief against Defendant General Motors LLC ("GM").

### NATURE OF THE CASE

1. GM designed, manufactured, distributed, marketed, sold, and leased Model Year 2010-2017 Chevrolet Equinox vehicles with 2.4-liter engines ("Class Vehicles" or "Vehicles") to Plaintiffs and Class Members. These engines were denominated within GM as the "LAF" and "LEA" engines (also referred to herein as the "EcoTech 2.4L" engine).

2. Engine oil, or motor oil, functions as an essential lubricant for the moving parts in internal combustion engines. It creates a film separating surfaces of adjacent moving parts to minimize direct contact, thereby decreasing heat caused by friction and reducing wear. Engine oil also has important cleaning and sealing functions, and serves as an important medium for dissipating heat throughout the engine. As a result, the Class Vehicles need the proper amount of engine oil in order for their engines and related parts to function properly and safely.

3. Modern automobile engines are not engineered to flow substantial quantities of oil into combustion chambers. When faulty engines permit more than *de minimis* amounts of oil to the combustion chamber, this leads to a host of serious problems, including prematurely low levels of engine oil, low oil pressure, lack of engine lubricity, engine knock, spark plug fouling and knock, and major damage to other critical engine parts, including, but not limited to, timing chains.

4. Prior to 2010, GM knew that the Class Vehicles contained one or more design and/or manufacturing defects, including, but not limited to, defects contained in the Class Vehicles' engines that cause them to be unable to properly utilize the engine oil and, in fact, to improperly burn off and/or consume abnormally high amounts of oil (the "Oil Consumption Defect").

5. The primary cause of the Oil Consumption Defect was the composition and construction of faulty piston rings, including both "compression" and "oil" rings. In particular, the composition of compression rings did not permit these rings to withstand the higher compression ratios of the LAF and LEA engines, in that the coating would fail and cause premature ring wear, and that these rings were too thin. Additionally, GM installed low-tension oil rings in these engines that do not maintain sufficient tension to keep oil in the crank case within design specifications. Individually or taken together, the EcoTec 2.4L piston rings failed to maintain a sufficient seal within the crankcase.

6. Included in the EcoTec 2.4L engines, which further contributes to the Oil Consumption Defect, are spray jets that spray oil onto the piston skirt and cylinder wall. This was not common on other engines with adequate piston rings. This oil spray overloads and fouls the defective piston rings, triggering oil to migrate past the piston rings into other places in the engine. This excess oil either burns off or accumulates as a carbon buildup on the combustion chamber's surfaces.

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7. In addition, the EcoTec 2.4L engine includes a flawed Positive Crankcase Ventilation system that vacuums oil from the valve train into the intake system, where it is ultimately burned in the combustion chambers. This vacuuming process also contributes to excessive oil consumption.

The Class Vehicles incorporate a system that is supposed to warn drivers of low oil 8. pressure caused by low engine oil levels. This system is referred to in this Complaint as the "Oil Pressure Warning" ("OPW") system. The OPW system is supposed to warn drivers of low levels of engine oil in two ways: First, the OPW system is supposed to display a textual warning on an alphanumeric display that GM calls the "Driver Information Center" ("DIC"), located in the dashboard in the instrument cluster immediately behind the steering wheel and in front of the driver. Second, the OPW is supposed to display an illuminated red image of an oil canister on the DIC. This illuminated warning light, called the "Engine Oil Pressure Light" in the Class Vehicles' manuals, signifies "that oil is not flowing through the engine properly" and that "[t]he vehicle could be low on oil."<sup>1</sup> As discussed in more detail below, the OPW's warnings do not provide any indication as to when the oil pressure in the Class Vehicles falls to levels low enough to damage internally lubricated parts or cause engine failure. Similarly, the Engine Oil Pressure Light illuminates well past the time when the Class Vehicles are below a critical oil level. Even if the Class Vehicles did adequately warn drivers of critically low oil conditions (which they do not), any such warnings would not prevent the damage caused by the Oil Consumption Defect.

9. Further contributing to the excessive oil loss and variety of engine damage problems caused by the Oil Consumption Defect in the Class Vehicles is GM's implementation of a defective oil life monitoring system. This system is referred to in this Complaint as the "Oil Life Monitoring" ("OLM") system. This system monitors engine conditions such as revolutions and temperature to estimate deterioration in oil quality and the remaining useful life of the engine oil following an oil change. After each oil change, the OLM system must be reset manually following

<sup>&</sup>lt;sup>1</sup> GM, 2017 Equinox Owner's Manual 111.

each oil change. In each Class Vehicle, because the Oil Consumption Defect causes the engine oil to be consumed at an increased rate, the OLM system fails to advise drivers when insufficient oil remains in their vehicles. The OLM's function—to measure remaining oil life following an oil change based upon the regular estimated rate of oil consumption—is undermined by the Oil Consumption Defect, thereby rendering the OLM system useless. In fact, reliance on the OLM system instead encourages owners to drive with a false sense of security for thousands of miles after their oil levels fall dangerously low, because the OLM cannot display the correct remaining oil life based upon the increased defective oil consumption rate. Thus, the Class Vehicles provide no notice to drivers of the low oil levels who first learn of the problems when the vehicles stall or experience complete engine failures. The result is a system that causes drivers to travel thousands of miles of miles with inadequate engine lubricity levels, wearing out and damaging moving internal engine components—a very serious problem in light of the Oil Consumption Defect causing excessive oil loss the Class Vehicles.

10. In addition to the defective OLM system, the Class Vehicles include a lighted Oil Pressure gauge on the dash and an oil canister image that will ostensibly illuminate when a vehicle is low on oil. As discussed in more detail below, this Low Oil Pressure gauge does not provide any indication as to when the oil pressure in the Class Vehicles falls to levels low enough to damage internally lubricated parts or cause engine failure. Similarly, the oil canister symbol illuminates well past the time when the Class Vehicles are below a critical oil level. Even if the Class Vehicles did adequately warn drivers of critically low oil conditions (which they do not), any such warnings would not prevent the damage caused by the Oil Consumption Defect.

11. GM instituted a campaign in or about February 2013 to reprogram the OLM in Class Vehicles in order to reduce the recommended oil service intervals. On information and belief, GM developed the new OLM program no later than December 2012. These changes were motivated by GM's recognition of the Oil Consumption Defect, to reduce expensive warranty repairs caused thereby. However, GM deliberately hid this information from consumers, and

mislead consumers about the true motivation for OLM reprograming campaign. The OLM reprograming campaign also reflects GM's recognition that owners of its vehicles rely on the OLM to guide them about when the engine oil in the Class Vehicles requires attention.

12. Problems associated with excessive oil consumption and the Oil Consumption Defect include, but are not limited to: unanticipated engine shutdowns, engine stalls, engines running excessively hot, spark plug fouling, engine misfires, unexpected loss of power, vehicle jerking, and other problems as discussed herein. Inadequate engine oil levels resulting from the Oil Consumption Defect have the potential to cause engine fires. The failure of the OPW and OLM systems to properly function and adequately warn the driver of the dangerously low oil levels amplifies the potential problems and dangers caused by the Oil Consumption Defect.

13. These problems create a substantial safety risk and, therefore, the Class Vehicles do not provide for safe and reliable transportation.

14. The Oil Consumption Defect is a substantial safety concern because it causes excessive oil consumption that cannot be reasonably anticipated or predicted, and causes the engine to run while dangerously low on engine oil. The Oil Consumption Defect is unreasonably dangerous because it can cause engine failure while the Class Vehicles are in operation at any time and under any driving conditions or speeds, thereby placing drivers, passengers, and the public at risk of accidents and injury. In particular, the Oil Consumption Defect can result in:

- a. Sudden engine shutoff, resulting in loss of power, loss of braking, and inability to adequately maneuver in high-speed or congested driving situations;
- Driver distraction due to sudden and unexpected engine shutoff, caused by sudden loss of power, illumination of warning lights and sounds, and loss or diminution of power brake assist;

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- c. Loss of maneuverability in high-speed or congested driving conditions due to unexpected loss of engine power—even when the engine does not shut off;
- d. Unexpected vehicle stalling when the vehicle comes to a stop in traffic, thereby endangering vehicle occupants by substantially increasing the risk that other vehicles will hit the Class Vehicles that have stalled unexpectedly; and
- e. Engine shutoff, failure (e.g., seizure), or stalling that strands vehicle occupants in remote, extreme, or unsafe locations or weather conditions.

15. Because the Oil Consumption Defect can cause the Class Vehicles to consume unacceptably high amounts of engine oil, the rate of oil consumption for some Class Vehicles can be as high as one quart of oil per 1,000 miles driven. The Oil Consumption Defect requires the addition of substantial amounts of oil between scheduled oil changes to prevent engine damage. As a result of the Oil Consumption Defect, many consumers have resorted to purchasing an extra supply of oil and carrying it with them at all times when driving.

16. Plaintiffs and Class Members reasonably expected that their Class Vehicles would not experience excessive oil consumption during the vehicles' foreseeable and normal usage, including, but not limited to, the expectation that the Class Vehicles would not require unreasonably frequent oil changes/additions between scheduled oil changes and that the Class Vehicles would not suffer from a dangerous defect that could cause the Class Vehicles to unexpectedly shut off, seize, stall, lose power, or catch fire during operation, creating the potential for accidents and injuries.

17. In particular, Plaintiffs and reasonable purchasers of an American-manufactured four-cylinder vehicle such as the Class Vehicles reasonably do not expect their vehicles to consume more than one quart of oil between regularly scheduled oil changes. In this pleading,

"regularly scheduled oil changes" (or oil change interval, "OCI") means the manufacturer's recommended oil change interval.<sup>2</sup>

18. Prior to purchasing the Class Vehicles, Plaintiffs and Class Members did not know that the Class Vehicles suffered from the Oil Consumption Defect. GM did not disclose the Defect, nor did GM notify or instruct its authorized dealers to disclose the defect to Class Vehicle owners and prospective purchasers. Plaintiffs and Class Members therefore did not contemplate that the Class Vehicles' engines would require supplemental oil to be added between regularly scheduled oil changes, as well as related repairs to address the defects costing hundreds to thousands of dollars.

19. GM knew and/or was on notice of, and was therefore reckless or deliberately indifferent in failing to conclude, that the Class Vehicles are defective and suffer from the Oil Consumption Defect and are not fit for their intended purpose of providing consumers with safe and reliable transportation. In particular, as discussed herein, the vehicles are often inoperable, useless and unsafe or the class representatives are forced to stop driving the Class Vehicles due to the Oil Consumption Defect. Nevertheless, GM actively concealed and failed to disclose the Oil Consumption Defect to Plaintiffs and Class Members at the time they purchased or leased their Class Vehicles and thereafter.

20. As detailed in this pleading, GM actively concealed the Oil Consumption Defect from Plaintiffs and Class Members since the time they purchased or leased their Class Vehicles. GM's concealment caused Plaintiffs and Class Members to experience the Oil Consumption Defect throughout the life of the Class Vehicles, including within the warranty period.

<sup>&</sup>lt;sup>2</sup> GM recommends that Equinox owners "Check engine oil level and oil life percentage. Change engine oil and filter, if needed" every 7,500 miles. GM, 2017 Equinox Owner's Manual 279.

21. Had Plaintiffs and Class Members known at the time of purchase or lease about the Oil Consumption Defect and the associated costs and safety hazards related to the Defect, Plaintiffs and Class Members would not have purchased the Class Vehicles or else would have paid significantly less for them.

22. On information and belief, many owners of Class Vehicles suffer engine failure as a result of the Oil Consumption Defect. Many owners find after purchasing their Class Vehicles, resale value is greatly diminished, or nonexistent, due to the Oil Consumption Defect. For instance, Consumer Reports has listed the model year 2010 and model year 2011 Chevrolet Equinox and GMC Terrain as one of its "Used Cars To Avoid Buying" due to the engine problems associated with the Oil Consumption Defect.

23. Every Class Vehicle through model year 2015 was sold or leased pursuant to express and implied warranties, including a Powertrain Limited Warranty that covers the cost of all parts and labor necessary to replace or repair powertrain components, including the engine, pistons, and piston rings, that are defective in workmanship and materials within five years or 100,000 miles, whichever occurs first, calculated from the start date of the Basic Limited Warranty. GM reduced its powertrain warranty to five years or 60,000 miles, whichever occurs first, for model year 2016 and model year 2017. The Limited Warranty begins on the date in which the purchaser first put the vehicle into service. On information and belief, the Limited Warranty transfers automatically with the transfer of vehicle ownership during the warranty period.

24. GM has failed to recall the Class Vehicles to address the Oil Consumption Defect. GM has thus far failed to acknowledge that this Defect presents a substantial safety risk.

25. Beginning in August 2014 for the model year 2010 Class Vehicles, GM extended its Limited Powertrain Warranty to cover piston assemblies to ten years or 120,000, whichever

occurs first, through a "Special Coverage Adjustment" ("SCA"). GM subsequently extended SCA coverage for model year 2011 and model year 2012 Class Vehicles to 7.5 years or 120,000 miles, whichever occurs first, through additional SCAs.

- 26. GM has not issued SCAs for the remaining Class Vehicles.
- 27. The SCAs are in all practical effect extended warranties.

28. Plaintiffs and Class Members who received Owner's Letters from GM pursuant to the SCAs, or were informed of the SCAs through an authorized GM dealer or other source, foreseeably relied upon GM's promise to repair engines and to replace other powertrain components relating to or damaged by the Oil Consumption Defect. Such reliance includes, but is not limited to:

- Not taking their vehicles into an authorized dealer for inspection or repair due to GM's instruction not to do so unless the OPW system warned of low engine oil pressure or levels; and
- b. Relying on GM's OPW system to inform them of a possible engine oil problem, even though the OPW was faulty and did not reliably function to provide adequate warning.

29. The Owner's Letters issued as part of the SCAs tells consumers that their vehicles "may" experience "excessive" oil consumption, but does not completely disclose the full extent of the Oil Consumption Defect or its causes. Instead, on information and belief, the SCAs actively concealed the nature and extent of the Defect, as detailed below.

30. The SCAs purported to impose unworkable and unreasonable preconditions on Plaintiffs and Class Members to obtain repair or replacement of their defective EcoTec 2.4L engines. Namely, the SCAs conditioned inspection and repair of Class Vehicles pursuant to the SCAs on the fact that the OPW system have previously warned owners of an issue with the engine oil in their Class Vehicle. These preconditions breached GM's warranty obligations.

31. Despite notice of the Oil Consumption Defect from various internal sources, GM has not recalled the Class Vehicles, has not offered all of its customers a suitable repair or replacement free of charge, has not replaced defective EcoTech 2.4L engines or authorized full repair of all internal and external parts damaged by the Defect, and has not offered to reimburse all Class Vehicle owners and leaseholders who incurred costs related to the Defect, including, but not limited to, costs for inspections, diagnosis, repairs, and unreasonably frequent oil changes/additions between regularly scheduled oil changes.

32. As a result of their reliance on GM's omissions and/or affirmative misrepresentations, Plaintiffs and Class Members have suffered ascertainable losses of money, property, and/or of value of their Class Vehicles.

### **CITIZENSHIP OF PARTIES**

Plaintiff Ellen Berman is a Florida Citizen who is domiciled in Port St. Lucie,
 Florida.

34. Plaintiff Dayana Guach is a Florida Citizen who is domiciled in Davie, Florida.

35. Defendant General Motors LLC is a Delaware limited liability company with its principal place of business located at 300 Renaissance Center, Detroit, Michigan. General Motors LLC is a citizen of the States of Delaware and Michigan.

36. The sole member and owner of General Motors LLC is General Motors Holdings LLC. General Motors Holdings LLC is a Delaware limited liability company with its principal place of business in the State of Michigan. General Motors Holdings LLC is a citizen of the States of Delaware and Michigan.

37. The sole member and owner of General Motors Holdings LLC is General Motors Company. General Motors Company is a Delaware corporation with its principal place of business in the State of Michigan. General Motors Company is a citizen of the States of Delaware and Michigan.

38. GM, through its various entities, including Chevrolet,<sup>3</sup> designs, manufactures, markets, distributes, and sells its vehicles in this District and multiple other locations in the United States and worldwide. GM and/or its agents designed, manufactured, and installed the GM engine systems in the Class Vehicles. GM also developed and disseminated the owner's manuals, warranty booklets, advertisements, and other promotional materials pertaining to the Class Vehicles.

### JURISDICTION AND VENUE

39. This Court has jurisdiction over this action under the Class Action Fairness Act ("CAFA"), 28 U.S.C. § 1332(d). There are at least 100 members in the proposed class, the aggregated claims of the individual Class Members exceed the sum or value of \$5,000,000.00 exclusive of interest and costs, and Members of the Proposed Class are citizens of states different from Defendant.

<sup>&</sup>lt;sup>3</sup> Chevrolet dealerships, as referenced throughout this Complaint, are authorized GM dealerships. Upon information and belief, these dealerships, at all times relevant, had access to documents Plaintiffs and Class Members did not, including all Technical Service Bulletins ("TSB"), Service Bulletins, and other documents discussed herein. These dealerships had knowledge of the Oil Consumption Defect through these documents and were performing Oil Consumption tests on Class Vehicles pursuant to these documents at the direction and instruction of GM. Similarly, the Special Coverage Adjustments ("SCA") (examples of which are attached as **Exhibits 1** and **6**), as described herein, require that "repairs and adjustments qualifying under this special coverage must be performed by a General Motors dealer." A Chevrolet dealership constitutes such a "General Motors dealer."

40. This Court may exercise jurisdiction over GM because, through its business of distributing, selling, and leasing the Class Vehicles in this District, GM has established sufficient contacts in this District such that personal jurisdiction is appropriate.

41. Venue is proper in this District under 28 U.S.C. § 1391(a) because a substantial part of the events or omissions giving rise to Plaintiffs' claims occurred in this District. Specifically, Plaintiff Berman's Class Vehicle was purchased in this District.

### PLAINTIFFS' FACTUAL ALLEGATIONS

#### **Plaintiff Ellen Berman**

42. On June 3, 2012, Plaintiff Berman purchased a new 2012 Chevrolet Equinox LTZ from Shoemacher Chevrolet, located in West Palm Beach, Florida, for approximately \$28,848. She uses her Class Vehicle for personal, family, or household purposes. Her vehicle was designed, manufactured, sold, distributed, advertised, marketed, and warranted by GM. Plaintiff Berman's Class Vehicle came with a Basic New Limited Warranty and Powertrain Limited Warranty that accompanies all GM vehicles.

43. Upon information and belief, the oil level in Plaintiff Berman's Class Vehicle was sufficient at the time of purchase.

44. Plaintiff Berman never learned of any oil consumption issues with the vehicles prior to the purchase of her Class Vehicle.

45. On March 27, 2017, within the Powertrain limited warranty and SCA, with approximately 38,000 miles on the odometer, Plaintiff Berman took her vehicle in for a routine oil change. Upon inspection, a service technician told Plaintiff Berman that the oil level within her Class Vehicle was low. Shortly thereafter, Plaintiff Berman started an oil consumption test at Dyer Chevrolet located in Fort Pierce Florida and was asked to return every 1,200 miles for evaluation.

46. On or around July 15, 2017, with 41,747 miles on her Class Vehicle, Plaintiff Berman returned to Dyer Chevrolet and explained to them that a "knocking" noise that had started within the engine of her Class Vehicle during normal use. Unbeknownst to Plaintiff Berman, this noise was a spark knock, which meant that internal damage was occurring within her Class Vehicle's engine. Plaintiff Berman was told by service technicians there was "nothing to worry about" and it was "nothing". Further, she was told that her Class Vehicle was only ½ quart low on oil and to continue the test.

47. On August 19, with 42,8585 miles on her Class Vehicle, Plaintiff Berman returned to Dyer Chevrolet and was told that her Class Vehicle had not lost any oil and was full. Because the knocking noise still occurred during normal use of her Class Vehicle, Plaintiff Berman was surprised that her vehicle had not lost any oil and she decided to continue the test.

48. On October 7, 2017, with 43,765 miles on her Class Vehicle, Plaintiff Berman returned to Dyer Chevrolet and again was told that her Class Vehicle had not lost any oil and was full. Plaintiff, because she still heard a knocking noise in her Class Vehicle, was again surprised to hear this and again decided to continue the test.

49. On November 18, 2017, with 44,720 miles on her Class Vehicle, Plaintiff Berman returned to Dyer Chevrolet and was told the Class Vehicle had a full oil level. Plaintiff still heard a knocking noise occurring within her Class Vehicle.

50. On January 13, 2018, with 45,879 miles on her Class Vehicle, Plaintiff Berman returned to Dyer Chevrolet and was told her Class Vehicle was 2 quarts low on oil. Plaintiff still heard a knocking noise occurring within her Class Vehicle and was instructed to continue doing the consumption test.

51. On March 3, 2018, with 46,968 miles on her Class Vehicle, Plaintiff Berman returned to Dyer Chevrolet and was told that her Class Vehicle was "not low" on oil.

52. On July 14, 2018, with 49,584 miles on her Class Vehicle, Plaintiff Berman returned to Dyer Chevrolet and was told that her Class Vehicle was <sup>1</sup>/<sub>4</sub> quart low. Dyer Chevrolet

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told Plaintiff Berman that her Class Vehicle "passed" the Oil Consumption test. Further, Dyer Chevrolet refused to make any repairs to Plaintiff Berman's Class Vehicle pursuant to the SCA, and said her Class Vehicle was not consuming enough oil to warrant any kind of repair pursuant to the SCA.

53. In early September 2018, with approximately 50,000 miles on her Class Vehicle, Plaintiff Berman personally checked her Class Vehicle's oil and found little oil on the dipstick. Concerned, Plaintiff called back to Dyer Chevrolet for an inspection. Plaintiff is scheduled to return to Dyer Chevrolet on September 15, 2018.

54. To date, Plaintiff Berman has never seen a low oil indicator illuminate in her Class Vehicle. Plaintiff Berman has regularly and routinely checked the oil level in her Class Vehicle and has regularly and routinely changed the oil in accordance with the vehicle's specifications.

55. Today, Plaintiff Berman has only 51,085 miles on her vehicle, and it continues to suffer from the Oil Consumption Defect.

56. Plaintiff Berman would not have purchased the Class Vehicle or else would have paid significantly less for it had she been aware of the Oil Consumption Defect, and had she known that the OPW system would not warn her if or when her Class Vehicle's engine was at risk. She did not receive the benefit of their bargain.

### Plaintiff Dayana Guach

57. On August 1<sup>st</sup>, 2013, Plaintiff Guach purchased a new 2013 Chevrolet Equinox, from AutoNation Chevrolet, located in Coral Gables, Florida, for approximately \$26,000. She uses her Class Vehicle for personal, family, or household purposes. This vehicle was designed, manufactured, sold, distributed, advertised, marketed, and warranted by GM. Plaintiff Guach's Class Vehicle came with a Basic New Limited Warranty and Powertrain Limited Warranty that accompanies all GM vehicles.

58. Upon information and belief, the oil level in Plaintiff Guach's Class Vehicle was sufficient at the time of purchase.

59. Plaintiff Guach never learned of any oil consumption issues with the vehicles prior to the purchase of his Class Vehicle.

60. In April 2018, within the Powertrain Limited Warranty, with approximately 70,000 miles on her Class Vehicle, Plaintiff Guach took her vehicle in for a routine oil change at One Stop Auto Repair and Tire Center - Emergency Auto Body Works and Tire Repair ("One Stop") located in Miami, Florida. Upon inspection, a service technician told Plaintiff Guach her oil level was low within her Class Vehicle. She was told that the car was burning through oil very quickly. Plaintiff Guach also noticed her Class Vehicle was making a loud "ticking" noise when driving during normal use. Unbeknownst to her, a spark knock was occurring in her Class Vehicle that was causing internal engine damage.

61. Thereafter, approximately 1000 miles later, Plaintiff Guach heard the knocking noise resume in her Class Vehicle. Concerned, given she just had her oil changed, Plaintiff Guach returned to One Stop for an inspection. Upon inspection, Plaintiff Guach was told that the oil was low within her Class Vehicle despite recently having an oil change. Thereafter, Plaintiff Guach had her oil changed.

62. Plaintiff Guach has had her Class Vehicle's oil changed at One Stop every 1,000 to 1,500 miles since April 2018. Due to her long commute to work, she has had her Class Vehicle's oil changed approximately 15 times since April 2018. Following each oil change, the ticking noise in her Class Vehicle subsides but resumes shortly thereafter.

63. In or around August 2018, Plaintiff Guach contacted AutoNation Chevrolet, where she purchased her Class Vehicle. Plaintiff Guach told the Autonation customer service representative that she had a 2013 model Equinox that was exhibiting signs of excessive oil consumption and asked if there was any warranty that would cover a repair to remedy the issue. The representative informed Plaintiff Guach that there was no warranty coverage that applied to her Class Vehicle, that GM had not issued a recall, and that it would cost her \$3,000.00 out-ofpocket to fix the Oil Consumption Defect in her vehicle. 64. To date, Plaintiff Guach has never seen a low oil indicator illuminate in her Class Vehicle. Plaintiff Guach has regularly and routinely checked the oil level in her Class Vehicle and has regularly and routinely changed the oil in accordance with the vehicle's specifications.

65. Today, Plaintiff Guach has approximately 115,000 miles on her vehicle, and it continues to suffer from the Oil Consumption Defect.

66. Plaintiff Guach would not have purchased the Class Vehicle or would have paid significantly less for it had she been aware of the Oil Consumption Defect, and had she known that the OPW system would not warn her if or when her Class Vehicle's engine was at risk. She did not receive the benefit of their bargain.

### **COMMON FACTUAL ALLEGATIONS**

67. For years, GM designed, manufactured, distributed, sold, and leased the Class Vehicles. It has sold, directly or indirectly through its dealers and other retail outlets, thousands of Class Vehicles throughout the United States.

68. After receiving numerous and persistent complaints about the Oil Consumption Defect, in July 2012, GM published an article in GM TechLink regarding excessive oil consumption in the 2.4L EcoTec LAF engine ("July 2012 GM TechLink article."). The article was titled "Excessive Oil Consumption."<sup>4</sup> A true and complete copy of this July 2012 GM TechLink article is attached hereto as **Exhibit 2**.

69. On information and belief, GM TechLink is a monthly periodical published by GM for its dealership technicians and service personnel that discusses, among other matters, repair procedures concerning GM vehicles.

70. The GM TechLink and TSBs referenced in this Complaint are not generally made available to the public.

71. In the July 2012 GM TechLink article, GM acknowledges the existence of the defect to its dealer technicians and notes, "Excessive oil consumption may be noticed on some

<sup>&</sup>lt;sup>4</sup> The relevant portion of the July 2012 GM TechLink article, attached hereto as **Exhibit 2**, titled "Excessive Oil Consumption" appears at page 3 of the exhibit.

2010 Equinox and Terrain models equipped with the 2.4 L engines." The article states, "this condition not be evident until the vehicle has accumulated 20,000 miles or more." "Upon inspection, excessive oil in the fresh air side of the PCV system due to excessive crankcase pressure and blow-by may be noted. In addition, all four spark plugs will have obvious/excessive oil deposits on them."

72. The July 2012 GM TechLink article indicates that excessive oil consumption can be verified by *either* the presence of obvious oil deposits on all four spark plugs, *or* an oil consumption test.

73. The July 2012 GM TechLink article indicates that in cases where the cylinder walls exhibited "zebra stripe" wear patterns associated with excessive oil consumption in the LAF engine, the technician was to "replace the engine . . . since this engine does not have serviceable cylinder liners like some of the other Ecotec engines."

74. On information and belief, the July 2012 TechLink article reproduces verbatim information contained in a service bulletin (Technical Service Bulletin, or "TSB") published by GM prior to July 2012.

75. On information and belief, the July 2012 TechLink article reproduces verbatim information contained in a service bulletin (Technical Service Bulletin, or "TSB") published by GM prior to July 2012.

76. Namely, as the consumer complaints below indicate, GM was aware, or should have been aware, that the Oil Consumption Defect was present in the Class Vehicles dating back to at least September 2009. This date pre-dates the sale of any Class Vehicle to any of the Class Representatives.

77. Thus, by September 2009, GM knew or should have known through sufficient product testing, consuming complaints, or other methods, that the Class Vehicles contained the Oil Consumption Defect and posed a safety hazard.

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78. The Class Vehicles contain one or more design and/or manufacturing defects, including, but not limited to, the Oil Consumption Defect, as described herein.

79. Insufficient oil causes Class vehicle engines to stall, to run hot, spark plugs to foul, engines to misfire, the vehicles to experience unexpected loss of power, jerking and other problems, posing enough of a safety risk such that the vehicles do not provide safe reliable transportation. The drivers are left at risk of the Class Vehicle being stranded in hazardous traffic conditions, dangerous weather conditions and/or remote locations.

80. On information and belief, GM learned of the Oil Consumption Defect prior to 2010 through sources not currently available to Class Members, including, but not limited to: (1) pre-release testing data; (2) early consumer complaints about the Oil Consumption Defect to GM and its dealers about the Class Vehicles, as well as other earlier model year versions of such vehicles; (3) testing conducted in response to those complaints; and (4) aggregate data from GM dealers, including dealer repair orders and high warranty reimbursement rates that can cost up to several thousand dollars for each class vehicle.

81. GM's authorized dealers routinely provide maintenance service for Class Vehicles, including the MY 2010 and 2011 Equinoxes and Terrains. One of the most frequent services performed for new car owners is an oil change.

# A. All Class Vehicles Are Sold with the Oil Consumption Defect Which Is Present at the Point of Sale.

# 1. The Piston Rings in the Class Vehicles Lead to Oil Consumption and Engine Damage.

82. All Class Vehicles have engines that incorporate improperly coated compression rings or Low-Tension Oil Rings and other potential defects that are inherently defective because these defects allow excessive and dangerous oil consumption, which leads to inadequate engine lubricity.

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83. The compression rings are not properly coated and/or are not robust enough to withstand the greater pressures generated by the EcoTec 2.4L engine. This causes premature ring wear and allows excessive oil flow into the combustion chamber from the crankcase. This leads to further engine damage, including engine knock.

84. The Low-Tension Oil Rings do not apply sufficient tension to prevent oil from being consumed in the combustion chamber, which in turn fouls spark plugs, and creates harmful carbon buildup in the pistons and cylinders.

85. The Oil Consumption Defect is a safety concern because it prevents the engine from maintaining the proper level of engine oil and causes voluminous oil consumption that cannot be reasonably anticipated or predicted.

86. The Oil Consumption Defect causes the Class Vehicles to consume unacceptably high, abnormal amounts of oil during normal and foreseeable usage, which requires Class Members to pay for unreasonably frequent oil changes and/or additions after very short driving distances, as well as costly engine repairs/replacements that can cost thousands of dollars in order to repair the defect.

87. GM provided owners substantially similar express limited warranties for model years 2010-2015, and substantially similar express limited warranties for model year 2016 and subsequent vehicles but with reduced mileage coverage for its powertrain warranties on those model years.

88. In or about February 2013, GM sent "Customer Satisfaction" letters to all MY 2010-2013 Class Vehicle owners informing them that "GM [has] recently introduced into production a software update for the life monitor system [which] will recommend more frequent oil changes to support engine durability and overall operating costs." ("February 2013 OLM

Campaign.") Further, GM informed class vehicle owners that, "[a]t no-charge, your GM dealer will update your vehicle with these same improvements."

89. On information and belief, the GM February 2013 OLM Campaign reduced the maximum oil change interval from over 10,000 miles to no more than 7,500 miles, and also caused the OLM system to instruct drivers to change their engine oil much more frequently.

90. A motivating purpose for the GM February 2013 OLM Campaign was to conceal the Oil Consumption Defect and to reduce the costly warranty engine replacements, piston assembly replacements, and other repairs related thereto. By reprogramming OLM systems in Plaintiff's and Class Member's vehicles, GM effectively transferred its warranty repair costs to its customers in the form of more frequent oil service fees and costs for engine oil and oil filters.

91. Upon information and belief GM instituted the February 2013 OLM Campaign in an attempt to delay the onset of the costly engine repairs that Class Members are substantially certain to experience as a result of the defect alleged herein. By reprogramming the OLM to recommend more frequent oil changes, upon information and belief, GM hoped that fewer owners would drive thousands of miles with extremely low engine oil levels. Thus, this reprogramming of the OLM, while did not eliminate the Oil Consumption Defect. Nor did this reprogramming prevent premature powertrain component wear and other engine damage due to the defect. This reprogramming was an attempt to mask the manifestations of the Oil Consumption Defect and place the financial burden on Plaintiffs and Class Members.

92. By failing to inform the owners of MY 2010-2017 vehicles with the 2.4L EcoTec engine of its excessive oil consumption problems, GM mislead consumers, engaged in half-truths, and exposed its customers to substantial safety risks.

93. In or about August 2013, GM published another article in TechLink (August 2013 TechLink article"), entitled "2.4L EcoTec Engine Oil Consumption." In this article, GM again acknowledges the existence of excessive oil consumption in certain Class Vehicles, claiming that "Excessive oil consumption on some 2010-2013 LaCrosse, Equinox, Terrain and 2011-2013 Regal models equipped with the 2.4L engines does not require engine replacement. If excessive oil consumption is confirmed after an oil consumption test, new piston and rings should be installed." A true and complete copy of this August 2013 TechLink article is attached hereto as **Exhibit 3**.

94. The August 2013 TechLink article identified a defect in the 2.4L EcoTec engine's piston rings, stating in part:

**Piston Ring Coating.** The top compression ring in the new kit has a more robust coating on it that is designed not to wear as quickly as the original coating. Tests indicate that it wears about 4-5 times longer than the original coating.

If the top compression ring is worn, it will allow combustion pressure past it, which causes the oil control rings to be less effective and results in excessive oil consumption.

95. In or around September 2013, GM also acknowledged the existence of the oil consumption engine defect in a Technical Service Bulletin ("TSB") that it only makes available to its dealers, not consumers. A true and complete copy of this September 2013 TSB is attached hereto as **Exhibit 4**.

96. Although the September 2013 TSB recommended certain engine repairs (*e.g.*, replacement of the pistons and rings as described above) "under warranty," Defendant arbitrarily and unfairly instructed its dealers not to perform the engine repairs identified in the TSB under warranty unless the consumer's vehicle undergoes an oil consumption test that has to show the consumer's vehicle is consuming more than 1 quart of oil per 2,000 miles of driving. Defendant

continues to impose the arbitrary, unfair, and onerous oil consumption test as a precondition to honoring its warranty obligations in subsequent TSBs and to this day.

97. The GM-imposed oil consumption test is itself an unreliable test for excessive oil consumption. For instance, a given Class Vehicle may "pass" GM's mandated oil consumption test and in the next few weeks consume more than 1 quart of oil in 2,000 miles.

98. GM knows that its oil consumption test is onerous to its customers and is unreliable. For example, on June 25, 2014, William Parenteau filed a complaint against GM in the United States District Court for the Central District of California, Case No. 2:14-cv-04961, in which he included detailed allegations of an oil consumption test performed by GM's authorized dealer in on his 2010 Equinox 2.4L vehicle. After the dealer, Bob Stall Chevrolet in Mesa, California, informed Mr. Parenteau that his vehicle had consumed no oil over a two-month/approximately 2,000 mile test period, Mr. Parenteau returned to the dealer a month and approximately 1,000 miles later. At that time, the dealer determined that there was no oil showing on the dipstick. On information and belief, these facts demonstrate that Mr. Parenteau's Equinox consumed over 1.25 quarts over a 1,000 mile period immediately after having been told his vehicle had "passed" GM's oil consumption test.

99. In May 2014, GM published an updated TSB relating to the Oil Consumption Defect. A true and complete copy of this May 2014 TSB is attached hereto as **Exhibit 5**.

100. As a result of their reliance on Defendant's omissions or misrepresentations, owners and lessees of the Class Vehicles, including Plaintiffs, have suffered ascertainable loss of money, property, or value of their Class Vehicles.

101. The Class Vehicles are equipped with a 2.4L EcoTec engine, have an oil capacity of 5 quarts, and contain one or more design, materials, and/or manufacturing defects that causes their engines to consume abnormally high amounts of oil.

102. In order for the engine to run effectively without causing engine damage, such as heat and friction wear, the pistons and cylinder walls must have a thin film of oil between the opposing metal surfaces. The oil reduces friction and heat, prevents surface scarring, and helps the moving components slide freely past each other.

103. To keep oil in the crankcase, and to prevent oil from traveling around the pistons and into the combustion chamber, pistons are fitted with compression and oil control rings (collectively, "piston rings"), These piston rings must withstand combustion pressures and hold combustion gases in the combustion chambers, keeping the gases out of the crankcase.

104. In the Class Vehicles, the piston rings that GM installed in the 2.4L Engines fail to achieve their intended purpose of keeping oil in the crankcase and out of the combustion chamber. Further, the rings fail to achieve their intended purpose of trapping combustion gases in the combustion chamber and out of the crankcase.

105. Specifically, the Class Vehicles' piston rings do not maintain sufficient tension, relative to the cylinder walls, and fail to keep oil from seeping past, resulting in excessive oil consumption and causing the problems described *infra*.

106. First, in the Class Vehicles, oil travels around the piston rings and reaches the combustion chamber, where it is burned during the engines' power stroke, thereby reducing the quantity of oil in the vehicle, reducing engine lubricity, and increasing the risk of correspondent engine damage.

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107. Second, the defective piston rings allow for oil to constantly foul the spark plugs in the Class Vehicles. Spark plug electrodes, protrude into the combustion chamber and generate the ignition spark. Importantly, the electrodes must be dry and free of debris to fire properly. When oil migrates into the combustion chamber in the Class Vehicles, the oil coats the spark plugs' electrodes and either diminishes or altogether disables their firing performance.

108. Third, the oil that passes around the rings in the Class Vehicles, and that is not burned in the combustion chamber, gathers and hardens, creating carbon buildup. Due to the excessive carbon buildup in the combustion chamber and on top of the pistons, the Class Vehicles suffer from pre-ignition detonation, or "spark knock" as it is commonly called. Pre-ignition detonation disrupts the proper seating of the piston rings in their respective grooves, which causes them to wear out as they grind against the cylinder walls improperly. This results in the rings not sealing properly and thus allows for even more oil consumption. Pre-ignition detonation also vaporizes the cylinder wall oil film, pushing it past the rings and into the crankcase where it is vacuumed into the intake manifold via the Positive Crankcase Ventilation ("PCV") system.

109. The Oil Consumption Defect is a latent defect that existed at the point of sale when Plaintiffs and Class Members purchased their Class Vehicles.

110. Because of the Oil Consumption Defect, Plaintiffs and Class Members did not receive the full benefit of their bargain in purchasing their Class Vehicles.

111. Prior to the spring of 2014, and upon information in 2013, GM issued a technical service bulleting (TSB) number 13-06-01-003 relating to the Oil Consumption Defect for MY 2010-2013 Class Vehicles. In this TSB, GM acknowledges that it has received customer "comments" on excessive oil consumption, "and/or that they have to add oil between oil changes." This TSB was not distributed to consumers. In the TSB, GM directs dealer technicians to conduct

an "oil consumption test," but first to verify that the vehicles computer (Electronic Control Module) has been re-programmed "to adjust the engine oil life monitor to a maximum of 7,500 miles."

112. Upon information and belief, in or about December 2012 GM re-calibrated the Class Vehicles' ECM software for the OLM to reduce the maximum regular oil change interval to 7,500 miles, from potentially up to twice that figure (15,000 miles). Upon information and belief, a motivating factor for this re-programming of the OLM (retroactive for MY 2010, 2011, 2012, and many 2013 Class Vehicles [and Plaintiffs' vehicles]) was to surreptitiously reduce GM's exposure to major powertrain warranty repairs related to the Oil Consumption Defect. In particular, on information and belief, GM unilaterally and without informing Plaintiffs and Class Members of its true reasons for doing so, GM recognized by no later than the fall of 2012 that the 2.4L EcoTech engines in Class Vehicles were experiencing premature timing chain wear. On information and belief, this premature timing chain wear resulted from and was a symptom of the Oil Consumption Defect.

113. Upon information and belief, prior to the OLM re-programing by GM of the Class Vehicles, the recommended oil change interval for normal use was between 7,500 and 12,500 miles. In other words, an average recommended oil service interval on the Class Vehicles, as designed, was approximately 10,000 miles and no less than 7,500 for normal use (e.g., not extreme service conditions), depending upon the factors taken into account by the OLM software.

114. Upon information and belief, the EcoTech 2.4L engines that are the subject of this Complaint were not designed to consume 1 quart per 2,000 miles, or 1 quart per 3,000 miles, or 1 quart per 4,000 miles, or 1 quart per 5,000 miles, or 1 quart per 6,000 miles, or one quart per 7,000 miles. At most, on information and belief, the EcoTech 2.4L engine was designed to consume *no* 

more than 1 quart per 8,000 miles under normal service—a figure one-fourth the level later designated unilaterally by GM in TSB 13-06-01-003 and the SCAs described *infra* as not "excessive," e.g., normal.

115. Subject to further investigation, because Class Vehicles that consumed oil at a rate greater than 1 quart per 8,000 miles or so consume oil at a rate greater than they are designed to do, they are defective in their materials or workmanship, or are otherwise subject to repair or component replacement under GM's implied or express warranties.

116. The oil consumption test that GM mandated prior to authorizing any repair under the TSB 13-060-01-003 or the 2014-2017 SCAs discussed *infra* is not reasonably required as a precondition for coverage under any warranty or SCA, in that, inter alia:

- a. It requires a minimum of five appointments by customers to the GM dealership;
- It exposes Plaintiffs and Class Members to unreasonable safety risk and risk of serious potentially catastrophic engine or exhaust system damage during the 2,000 miles GM directs that the test be conducted, which can potentially last months;
- It is set up to discourage customers from completing it, given the inconvenience,
   disruption, and expenses involved;
- d. It is unreliable, in that the same engine can "fail" a test at one point in time and later "pass" the test, according to GM's authorized dealers; and
- e. GM's test ignores other far more reliable indicia of excessive oil consumption, including its dealers' own service records, reports by customers of consumption rates, and reports from a customer's independent mechanic. GM's warranties do not permit GM to ignore these other indications of defect as an excuse for refusing to repair or replace defective engines or pistons and piston rings.

117. In August 2014, GM offered to repair MY 2010 Class Vehicles experiencing excessive oil consumption, as defined by GM. This repair included, among other things, installation of new pistons and new piston rings with improved combustion gas control and wear characteristics due to an upgraded coating on the compression rings, increasing the ring radial thickness and increasing the ring height, and by decreasing the ring end gaps. However, as discussed *infra*, this "Special Coverage Adjustment" (SCA) was inadequate and ineffective for Class Members and Plaintiffs.

118. In July 2015, GM offered a repair to the MY 2011 Class Vehicles that was similar in material respects to the MY 2010 SCA. However, as discussed *infra*, this SCA was ineffective for Class Members and Plaintiffs.

119. In 2017, GM offered a repair to MY 2012 Class Vehicles that was similar in material respects to the MY 2010 and MY 2011 SCA. However, as discussed *infra*, this SCA was ineffective for Class Member and Plaintiffs.

120. Although GM was aware that this was a known defect in the Class Vehicles, it did not recall the class vehicles nor did it send any notice of the need for this repair to consumers including the Plaintiffs and Class who owned Class Vehicles.

### 2. The Spray Jets in the Class Vehicles Contributes to Oil Consumption and Engine Damage.

121. Included in the 2.4 liter Engines, which further contributes to the Oil Consumption Defect, are spray jets that spray oil onto the piston skirt and cylinder wall, which is not common on other engines with wider piston rings. This oil spray overloads and fouls the defective piston rings, triggering oil to migrate past the piston rings into other places in the engine.

122. In addition, the excessive oil spray collects on the piston ring surfaces forming carbon buildup. Carbon buildup on the piston rings interferes with the rings' seating in their grooves, and thus interferes with the rings' ability to seal out oil. Once the rings lose proper groove seating, they become misaligned with the cylinder bores. Immediate and aggressive ring

deterioration occurs as the fragile rings scrape against the harder steel cylinder bores at unintended angles.

# **3.** The PCV System in the Class Vehicles Contributes to Oil Consumption and Engine Damage.

123. GM's PCV system, as installed in each of the Class Vehicles, contributes to oil consumption and engine damage by vacuuming oil from the valve train. This system is closed to the atmosphere in that everything that is internal into the intake system of the engine and crankcase remains in the PCV system.

124. The PCV system's intended purpose is to vent valve train gas pressures and recirculate that gas pressure into the intake manifold. The intake manifold distributes fresh air pulled through the intake filter, and recirculated air vented from the valve train, to the engines' combustion chambers. PCV systems are not intended to vacuum oil from the valve train.

125. In the Class Vehicles, however, the PCV system vacuums oil from the valve train and feeds it into the intake manifold runners and ultimately into the combustion chambers. By vacuuming oil from the valve train, the PCV system results in increased oil consumption, carbon buildup and the associated pre-ignition detonation, ring wear, ring failure, ring buildup, spark plug fouling, combustion chamber oil burn, low lubricity levels, internal component wear and component failure.

126. By March 2015, GM extended its warranty for the PCV problems on all 2010 to 2014 model year Class Vehicles to include "no charge" coverage up through 10 years or 120,000 miles, whichever comes first. *See* Exhibit 1.

127. GM acknowledged that its PCV system contributed to oil consumption in TSB #13-06-01-003H: Excessive Oil Consumption – Perform Oil Consumption Test and/or Install Piston and Piston Ring Kit. Released (Feb 9, 2016). TSBS are only seen by dealerships and not consumers; therefore, the Class and the Plaintiffs were unware of its existence. In that TSB, GM instructs dealers to "[t]he oil consumption may have clogged/reduced PCV flow. The PCV system should be serviced. Clean any ice/sludge/water/carbon out of the PCV pipes/hoes, the PCV nipple on the cam cover, the PCV orifice between the #2 and #3 intake runners."

### 4. The Class Vehicles Do Not Include a Warning System that Protects Drivers From the Effects of the Oil Consumption Defect.

128. In addition to the Oil Life Monitoring System (which does not monitor oil level), the Class Vehicles include an oil pressure gauge on the dash and an oil canister image that ostensibly would illuminate when a vehicle is low on oil. However, neither illuminates for low oil level.

129. The oil pressure gauge in the Class Vehicles fails provide any indication as to when a vehicle is dangerously low on oil. The oil pressure gauges in the Class Vehicles either have no indicator for low oil pressure, or they contain a single red hash mark (an indication of zero PSI). The oil pressure gauges fail to indicate dangerously low oil levels, but instead only illuminate when the vehicles have no oil pressure, which is far beyond the point at which a lack of oil and oil pressure will damage or destroy the Class Vehicle's engine.

130. Upon information and belief, the Class Vehicles communicate no visible or audible warnings of destructive oil pressure levels before the engines are damaged, internally seize, or fail altogether. Because the Class Vehicles provide no warnings prior to engine seizure or failure, they put the Vehicle's occupants and public safety at risk.

131. Even if the Class Vehicles did adequately warn drivers of dangerously low oil conditions (which they do not), any such warnings would do nothing to prevent the full scope of the harms caused by the Oil Consumption Defect. Because the Oil Consumption Defect results in oil migrating past the piston rings, it causes carbon buildup on the ring and cylinder surfaces and fouls spark plugs, even if drivers diligently, and constantly, top-off their oil. Once the spark plugs foul, hazardous engine misfire and engine shutdown events are unavoidable.

132. The OLM system, installed in each of the Class Vehicles, exacerbates the oil loss and engine damage problems caused by the Oil Consumption Defect, because the customers foreseeably rely on the OLM for guidance about when to attend to their engine oil needs. In particular, because Plaintiffs and Class Members reasonably do not expect to have to add oil between oil changes, they do not think that they need to worry about oil levels until the OLM tells them that they are due for an oil change.

133. On information and belief, GM understands that its customers rely on the OLM for guidance as to when to attend to engine oil service needs, including checking engine oil levels. Indeed, one of the reasons that GM re-programmed the Class Vehicles' OLM software was to encourage customers to attend to their engine oil level, directly or indirectly (by having the oil changed) more often.

134. GM's placement of the engine oil dipstick at a position in the engine compartment that is difficult to see further encouraged customers to rely on the dash indicators for information on when to check or service their engine oil.

GM could easily have ameliorated this confusion but chose not to do so. For instance, instead of saying that the engine oil had "72% quality remaining," or something similar, GM could have programed the OLM to display "Engine oil quality 72% remaining – check engine oil level," or used a comparable method to call the distinction between oil quality and oil level to the customer's attention.

### 5. The Oil Consumption Defect in the Class Vehicles Causes Excessive Oil Loss, Which Can Lead to Engine Damage.

135. The Oil Consumption Defect in the Class Vehicles results in excessive oil consumption, pre-ignition detonation, premature ring wear, premature ring fouling, premature ring failure, and spark plug fouling. It also results in inadequate engine lubricity, which creates increased friction, heat, metal on metal contact, and resulting premature engine damage. That

means that each Class Vehicle has suffered, and will continue to suffer, internally lubricated component premature wear and failure.

136. The internal engine components that are subject to premature wear and failure include: pistons, cylinder walls, rings, valves, valve guides, valve stem seals, lifters, push rods, camshafts, rockers, bearings, piston rods, wrist pins, crankshafts, and timing chain components.

137. Due to the Oil Consumption Defect, all of the Class Vehicles have suffered and will continue to suffer excessive oil consumption, creating metal-on-metal friction, heat levels that far exceed GM's original specifications, and resulting premature engine damage and rapid destruction.

138. Excessive friction and heat expansion will accelerate wear of internal metal components, sending metal shavings into the crankcase. The shavings travel through the oil passages and frequently become lodged in tight spaces, where they cut into component surfaces moving against them and potentially blocking oil passages.

139. Once the internal components are scarred and/or worn, they cannot be repaired and must be replaced. The friction and heat expansion damage caused by the Oil Consumption Defect is irreversible.

### 6. The Oil Consumption Defect Within the Class Vehicles Presents an Unreasonable Safety Risk.

140. Without sufficient oil and lubricity, the engines in the Class Vehicles will overheat and potentially catch fire.

141. In its owners' manuals for the Class Vehicles, GM warns: "Oil levels above or below the acceptable operating range shown on the dipstick are harmful to the engine." Excessive oil consumption can cause engine oil levels to fall to a point where oil pressure is reduced. As GM expressly acknowledges in the Class Vehicles' owner's manuals, low oil pressure presents an engine fire risk, stating: "Do not keep driving if the oil pressure is low. The engine can become so hot that it catches fire. Someone could be burned.

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142. Because the OPW system on Class Vehicles does not function properly to warn drivers of low oil pressure, the Oil Consumption Defect presents a direct risk of engine fires.

143. Low oil conditions are also unsafe because, if the engine experiences enough damage, the Class Vehicles' engines will seize and the Class Vehicles will shut down unexpectedly, which could cause an accident or leave drivers and passengers stranded in an unsafe situation. Upon information and belief, GM warns against this possibility in some of its automobile manuals, cautioning drivers that if a vehicle is driven while the engine oil pressure is low, severe engine damage may occur.

144. The Oil Consumption Defect also causes an unreasonable safety risk because excessive oil getting past the piston rings and fouling spark plugs causes engine misfires and engine shutdown that can leave drivers stranded and without the use of their vehicle. Further, the ignition failure caused by fouled spark plugs results in sluggish throttle response which places occupants in harm's way as they interact with other traffic. A Class Vehicle suffering from weakened ignition function cannot accelerate as GM intended. A Class Vehicle suffering from total ignition failure will not even run. Both conditions place occupants in any number of hazardous conditions that would not exist but for the Oil Consumption Defect.

145. The knocking sound that emits from Class Vehicles is a result of the engine undergoing a "spark knock." Unbeknownst to ordinary drivers, a knocking sound from their Class Vehicles' engine means that complete engine shutdown or a stall could happen at any point throughout their trip. Oftentimes, just as with the Plaintiffs, drivers have no idea as to the cause and significance of the knocking noise made by their Class Vehicles during normal vehicle use.

146. As explained above, drivers are not protected from these safety risks by any timely warning from their Class Vehicles that their oil levels are getting low. Upon information and belief,

the Class Vehicles do not provide any warning of low oil levels until the oil has already reached a level that is concurrent with engine misfire and shutdown and therefore unsafe.

### 7. GM's Knowledge and Refusal to Remedy the Oil Consumption Defect

147. GM knew by no later than late 2009 that the Class Vehicles contained the latent Oil Consumption Defect from the time they left the factory.

148. Alternatively, GM did not adequately test the LAF and LEA piston rings prior to their utilization. Instead, GM recklessly introduced the use of inadequately coated faulty low-tension oil rings that did not provide sufficient compression, without verification that they would not adversely impact engine safety and performance.

149. The Oil Consumption Defect was so prevalent in 2010 to 2013 Chevrolet Equinox models that GM issued Service Bulletin, SB-13-06-01-003F (the "Service Bulletin"), attached hereto as **Exhibit 5**, to aid repair technicians who encountered 2010 Class Vehicles with the Oil Consumption Defect.

150. Issued in May of 2014, the 2010 service bulletin acknowledges "[s]ome customers may comment on excessive oil consumption and/or that they have to add oil between oil changes." *Id.* 

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#### Condition

Some customers may comment on excessive oil consumption and/or that they have to add oil between oil changes.

#### Correction

For this condition, technicians should perform an oil consumption test by following the latest version of Corporate Bulletin Number 01-06-01-011. Before starting the oil consumption test, verify the ECM has latest TIS2web calibrations to adjust the engine oil life monitor to a maximum of 7,500 miles (12,070 km) — Refer to the latest version of Customer Satisfaction Bulletin #12312.

Inspect for any obvious oil leaks that may explain the oil consumption concern and repair as necessary.

**Important:** When checking the oil level with the oil dipstick design shown below, please note that the oil volume per notch is not linear due to the shape of the block. The upper notches (relative to the top of the handle) equal 0.24 quart (0.227 L) between each notch while the lower notches only equal 0.14 quart (0.132 L) between each notch. As a result, no oil will appear on the dipstick if it is low on oil by approximately 1.25 quarts (1.18 L) or more. When determining the oil consumption rate, the oil volume added to return it to the starting location is the total amount of oil consumed. The consumption rate must be documented on a repair order.

**Notice:** Do not add too much oil. An overfill can lead to burn off of the excess oil. Advise the customer to wait until the oil is below the cross-hatched area at the tip of the dipstick before adding oil.



If the oil consumption test indicates that the rate of consumption is greater than 1 quart (0.946 L) of oil every 2,000 miles (3,200 km), note the oil consumption rate, the date that the ECM was reprogrammed and any

repairs/diagnosis that you have performed.



 Camshafts and roller follower will have wear markings. This is normal and do not need to be replaced (refer to picture above).



 Valves stems may have deposits build up on them. These deposits are characteristic of a direct inject engine. The valves stems do not need to be cleaned as they are not affecting engine performance (Perfor to picture above).

### **Parts Information**

Part Number	Description
19303450	PISTON AND RING KIT, ENG (Set of 4)
12637166	GASKET KIT, CYL HD
12609291	SEAL, CM/SHF

#### Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
4080008*	Oil Consumption Test Setup	0.2 hr
4080178*	Piston, Connecting Rod and Bearing Replacement (Includes Oil Consumption Test)	9.5 hrs
Add	To Replace Fuel Pump (2010- 2011 Models Built Prior to March 2011 Only)	0.7 hr
Add	To Replace Balance Shaft Chain and Tensioner (2010-2011 Models Built Prior to March 2011 Only)	0.8 hr
Add	To Replace Timing Chain (2010- 2011 Models Built Prior to March 2011 Only)	0.5 hr

151. In addition to the Service Bulletin that was only distributed to authorized GM dealerships, GM sent out a SCAs for Model years 2010, 2011, 2012 to a few owners. Many, did not even receive the SCA or know of its existence. An actual version of a MY 2012 SCA is pictured below.

May 2017

This notice applies to your vehicle, VIN:

Dear

As the owner of a 2012 model year Chevrolet Equinox, your satisfaction with our product is very important to us.

This letter is intended to make you aware that some 2012 model year Chevrolet Equinox vehicles, equipped with a 2.4L engine, may exhibit excessive engine oil consumption (less than 2,000 miles per quart of engine oil), due to piston ring wear. If this condition is present, an audible rattle or knock from the engine may be heard. The engine oil pressure telltale may illuminate on the instrument panel or the following message may appear in the Driver information Center: "Oil Pressure Low - Stop Engine."

### Do not take your vehicle to your Chevrolet dealer as a result of this letter unless you believe that your vehicle has the condition as described above.

What We Have Done: General Motors is providing owners with additional protection for the condition described above. If this condition occurs on your 2012 Chevrolet Equinox within 7 years and 6 months of the date your vehicle was originally placed in service or 120,000 miles, whichever occurs first, the condition will be repaired for you at **no charge**. Diagnosis or repair for conditions other than the condition described above is not covered under this special coverage program.

What You Should Do: It is a good idea to check the engine oil level at each fuel fill. Your vehicle owner manual has instructions on checking engine oil in the Vehicle Care section. If you believe that your vehicle has the condition described above, repairs and adjustments qualifying under this special coverage must be performed by a Chevrolet dealer. You may want to contact your Chevrolet dealer to find out how long they will need to have your vehicle so that you may schedule the appointment at a time that is convenient for you. This will also allow your dealer to order parts if they are not already in stock. Keep this letter with your other important glove box literature for future reference.

**Reimbursement:** If you have paid for repairs for the condition described in this letter, please complete the enclosed reimbursement form and present it to your dealer with all required documents. Working with your dealer will expedite your request, however, if this is not convenient, you may mail the completed reimbursement form and all required documents to Reimbursement Department, PO Box 33170, Detroit, MI 48232-5170. The completed form and required documents must be presented to your dealer or received by the Reimbursement Department by May 31, 2018, unless state law specifies a longer reimbursement period.



152. Further, in order to receive a fix pursuant to the SCA, GM requires that an oil consumption test be conducted to determine if a full replacement of pistons and rings is required. Specifically, GM notes:

- If the oil consumption test indicates that the rate of consumption is less than 1 quart (0.946L) of oil every 2,000 miles (3,200 km), note the oil consumption rate and the date that the ECM was reprogrammed. No further action is required.
- If the oil consumption test indicates that the rate of consumption is greater than 1 quart (0.946 L) of oil every 2,000 miles (3,200 km), note the oil consumption rate, date that the ECM was reprogrammed and replace the pistons and rings.

153. Many of the consumers who received notice SCA from GM did not receive the piston ring repair. Namely, despite a Class Member's Class Vehicle exhibiting excessive oil consumption, often dealerships tell the Class Members their Class Vehicles have not exhibited sufficient oil consumption to receive the fix under the GM's TSB or its SCAs. Upon information and belief, thousands of customers have been denied piston ring replacements pursuant to the terms of the TSB and SCAs and others never received notice of the defect or its eligibility for coverage at all.

154. GM had knowledge of an excessive and dangerous oil consumption issue during the class period due to the faulty LAF and LEA piston rings and related defects in the engine. The excessive oil consumption indicates that there is a severe and latent defect with the engine that would have been demonstrated had GM performed adequate testing. 155. GM had and continues to have a duty to disclose the Oil Consumption Defect and the associated out-of-pocket repair costs to Plaintiffs and Class Members because: (1) the defect poses an unreasonable safety hazard; (2) GM had and continues to have exclusive knowledge and/or access to material facts about the Class Vehicles and engines that is not reasonably discoverable by Plaintiffs and Class Members; (3) GM has actively and fraudulently concealed the defect from its customers despite its knowledge, and (4) GM has communicated half-truths to customers, directly through owner letters and indirectly through its dealer network, regarding the nature of the Oil Consumption Defect.

# **B.** Customers Repeatedly Complained about Excessive Oil Consumption and Engine Damage in the Class Vehicles and Earlier Models.

156. As shown below, excessive oil loss, loud ticking or knocking noises coming from the engines, and stalling have been common complaints among drivers of Equinoxes from 2009 to present. During the class period there was an unusually large number of complaints of excessive oil consumption such that GM was put on notice of a specific problem.

157. On information and belief, GM began its design and manufacture of the 2.4L EcoTec engine under the "Old GM," i.e., the GM that filed bankruptcy and was ultimately reconstituted into "New GM" in 2009. As recognized by the Second Circuit, when Old GM declared bankruptcy, Defendant (New GM) immediately took over its business, without any "reorganization" as traditionally takes place in the case of a bankruptcy. *Elliot v. GM LLC*, 829 F.3d 135, 145-46 (2d Cir. 2016). Knowledge derived from complaints received by Old GM can be imputed to Defendant GM, at least insofar as that knowledge was in the possession of Old GM employees who continued employment at New GM or the knowledge was contained in a file transferred from Old GM to New GM. *See In re Motors Liquidation Co.*, 541 B.R. 104, 108 (Bankr. S.D.N.Y. 2015). Thus, upon information and belief, Defendant GM, at its inception, like Old GM,

had knowledge of the Oil Consumption Defect relating to the EcoTec 2.4L engineering, research, and testing.

158. Upon information and belief, faced with the fact that Class Vehicles were suffering excessive oil and engine damage due to the Oil Consumption Defect, GM issued multiple Technical Service Bulletins addressing the oil consumption issue ("TSBs"). But it did not recall all models affected by the Oil Consumption Defect. The TSBs suggested fixes to address symptoms and problems caused by or related to the Oil Consumption Defect, but GM eventually acknowledged *in* TSB 13-06-01-003 that the minimum necessary repair or component part replacement necessary to address this defect involved replacing the piston assemblies, including both pistons and piston rings.<sup>5</sup> Upon information and belief, the latest version of these TSBs was released on February 9, 2016.

159. Despite this knowledge, GM took no proactive steps like a recall to remedy this defect before damage was done to the engines, knowingly leaving Plaintiffs and the other Class Members driving defective Class Vehicles.

160. Upon information and belief, thousands of purchasers and lessees of the Class Vehicles have experienced manifestations of the Oil Consumption Defect. Complaints filed by consumers with the NHTSA and posted on various internet sites (e.g, terrainforum.com; carcomplaints.com, etc.) demonstrate that the Oil Consumption Defect is widespread.

161. GM, like other automobile manufacturers, monitors NHTSA and other complaints as part of its quality control measures. These complaints, some of which are included below, show GM's awareness of the Oil Consumption Defect and its potential danger (note that spelling and grammar mistakes remain as found in the original):

• <u>NHTSA Complaint on July 28, 2017 for 2010 Chevrolet Equinox:</u> <u>"TL\* THE CONTACT OWNS A 2010 CHEVROLET EQUINOX.</u> WHILE DRIVING 5 MPH PULLING INTO A SERVICE STATION, THE VEHICLE STARTED TO JERK VIOLENTLY. THE

<sup>&</sup>lt;sup>5</sup> See TSB #13-06-01-003H: Excessive Oil Consumption – Perform Oil Consumption Test and/or Install Piston and Piston Ring Kit. Released (Feb 9, 2016).

CONTACT SHIFTED THE GEAR INTO PARK. WHEN SHE ATTEMPTED TO SHIFT THE GEAR INTO REVERSE, THE GEAR SHIFTER FAILED TO GO INTO REVERSE. THE ENGINE WARNING INDICATOR ILLUMINATED WITH FAILURE CODE: P0776. THE VEHICLE WAS TAKEN TO AN INDEPENDENT MECHANIC (FISHER **TRANSMISSION**) WHERE IT WAS DIAGNOSED THAT THE PISTON RING, SNAP RING, AND 3-5R WAVE PLATE WERE DETACHED WITH METAL SHELVING AND NEEDED TO BE REPLACED. THE VEHICLE WAS NOT REPAIRED. THE MANUFACTURER WAS CONTACTED AND INFORMED THE CONTACT THAT THE VEHICLE WAS NOT COVERED UNDER THE WARRANTY. MANUFACTURER DID THE NOT OFFER FURTHER ASSISTANCE. THE APPROXIMATE FAILURE MILEAGE WAS 113,000. UPDATED 11/07/17\*LJ"

NHTSA Complaint on July 8, 2017 for 2010 Chevrolet Equinox: "PURCHASED VEHICLE USED IN 2013 WITH 28K MILES. STARTED NOTICING AN ENGINE KNOCK IN 2016, IN BETWEEN OIL CHANGES, @ APPRX. 85K MILES. BEGAN HAVING TO ADD 3-4 QUARTS OF OIL EVERY 1000 MILES, GIVE OR TAKE. CALLED DEALERSHIP FOR SERVICE -WHILE WARRANTY WAS STILL IN EFFECT - AND WAS TOLD IT WAS A COMMON PROBLEM WITH THIS ENGINE. AND ADDING OIL WAS ALL THAT NEEDED TO BE DONE. WHILE DEALING WITH THAT. HAD TO REPLACE THE SENSOR. AS VEHICLE STALLED WHILE IN A LEFT TURN LANE, WHICH ALMOST CAUSED ME TO BE REAR ENDED. DECEMBER 2016 - OIL CONTINUED TO BE BURNED AT AN ALARMING RATE, SO MY HUSBAND CONTACTED A FRIEND WHO WORKS FOR A CHEVY DEALER. WE WERE TOLD NOT ONLY IS THE MASSIVE OIL CONSUMPTION NOT NORMAL, BUT THAT GM IS FULLY AWARE OF THE PROBLEM, BUT REFUSING TO ISSUE A RECALL OR PAY TO HAVE THE PISTONS REPLACED! 2017 - HAVE CONTINUED TO ADD 2-4 QUARTS OF OIL EVERY 1000 MILES OR SO; THEN MAY 2017, RECEIVED NOTICE FROM GM ACKNOWLEDGING THE PISTON RING WEAR/EXCESSIVE OIL CONSUMPTION, BUT THAT IT'S ONLY REPAIRABLE WITHIN 7 YEARS 6 MONTHS OF ORIGINAL IN-SERVICE DATE, OR 120,000 MILES, WHICHEVER COMES FIRST! SERIOUSLY ?! I AM PAST BOTH & AM PISSED OFF! GM HAS KNOWN ABOUT THIS PROBLEM FOR YEARS, AND NEEDS TO TAKE FULL RESPONSIBILITY, NOT IMPOSE A YEAR/MILEAGE CAP! I WONDER IF A CLASS-ACTION LAWSUIT WOULD WAKE THEM UP? I'M NOT OPPOSED TO LOOKING INTO IT! DON'T GET ME WRONG -

PREVIOUS TO MY EQUINOX, I OWNED AN HHR FOR 11 YEARS, AND PRIOR TO THAT, A SUBURBAN FOR 5 YEARS. I LIKE MY CHEVY'S BUT THIS ISSUE HAS LEFT A BAD TASTE FOR THEM, AND AM TOTALLY UNIMPRESSED WITH THEIR LACK OF CONCERN REGARDING THIS ISSUE. FOR THOSE OF US THAT ARE PAST THE VERY CONVENIENT YEARS/MILES, THIS IS A VERY EXPENSIVE OUT OF POCKET REPAIR. I CAN'T EVEN TRADE IT IN, AS I STILL OWE ON THE DAMN LOAN!! STEP UP GM, & DO THE RIGHT THING! BY THE WAY - HUBBY IS REPLACING THE TIMING CHAIN TODAY :O["

- <u>NHTSA Complaint on July 8, 2017 for 2010 Equinox</u>: "WAS TOLD BY MY MECHANIC THE VEHICLE WAS BURNING OIL. FOUND OUT IN MAY 2017 THAT CHEVY IS AWARE OF A DEFECTIVE PISTON RING PROBLEM THAT CAUSES THIS. THEY HAVE BEEN AWARE SINCE AT LEAST 2015. WAITED 2 YEARS TO NOTIFY ME BY MAIL. WHEN I WENT TO A DEALER TO HAVE PROBLEM FIXED I WAS TOLD VEHICLE HAS TOO MANY MILES ON IT. IT WOULD NOT HAVE HAD TOO MANY MILES HAD I BENN NOTIFIED 2 YEARS AGO!"
- NHTSA Complaint on October 15, 2017 for 2012 Chevrolet Equinox: "TL\* THE CONTACT OWNS A 2012 CHEVROLET EQUINOX. WHILE DRIVING VARIOUS SPEEDS, A KNOCKING NOISE WAS HEARD COMING FROM THE ENGINE WITHOUT WARNING. WAS THE VEHICLE TAKEN TO AN INDEPENDENT MECHANIC WHO DIAGNOSED THAT THERE WAS A FAILURE WITH THE PISTON RING, WHICH CAUSED EXCESSIVE OIL CONSUMPTION. THE VEHICLE WAS NOT REPAIRED. THE CONTACT RECEIVED AN EXTENDED WARRANTY NOTIFICATION FOR THE ENGINE. THE MANUFACTURER STATED THAT THE VEHICLE WAS NOT COVERED UNDER THE EXTENDED WARRANTY DUE TO EXCESSIVE MILEAGE. THE FAILURE MILEAGE WAS APPROXIMATELY 115,000."
- <u>NHTSA Complaint on February 3, 2017 for 2012 Chevrolet Equinox</u>: "I PURCHASED THIS PRE-OWNED EQUINOX SEPTEMBER 30. IN DECEMBER I FOUND OUT FROM MY MECHANIC THAT THERE IS AN OIL CONSUMPTION PROBLEM. IT'S NOT LEAKING OIL, IT'S USING OIL. HE PRINTED OUT DOCUMENTATION THAT SHOWS 2012 EQUINOX VEHICLES HAVE THIS OIL CONSUMPTION PROBLEM DUE TO FAULTY

PISTON AND PISTON RING INSTALLATION. I BROUGHT IT TO MY LOCAL GMC/CHEVY DEALER AND HE SAID THERE IS NOTHING THAT GMC WILL DO FOR ME AND THAT IT WOULD BE \$3,000 TO FIX. I ASKED FOR AN OIL CONSUMPTION TEST BUT HE DIDN'T FOLLOW THROUGH TO SCHEDULE IT. THE VEHICLE HAD A POWER TRAIN WARRANTY THAT EXPIRED THIS LAST OCTOBER. BECAUSE OF THAT IT WON'T BE REPAIRED AT NO COST TO ME. BECAUSE THIS IS A KNOWN ISSUE THAT THIS VEHICLE ENGINE WAS PUT TOGETHER INCORRECTLY, THERE IS NO WAY THAT I SHOULD PAY FOR THE REPAIR. OVER TIME THIS WILL CAUSE IRREPARABLE DAMAGE TO THE ENGINE, LEAVING ME WITH MULTIPLE EXPENSIVE UPKEEP AND THE INABILITY TO SELL. IT JUST TURNED TO 82,000 MILES. MY FIRST AMERICAN BOUGHT CAR AFTER OWNING FOREIGN CARS FOR DECADES. WANTED TO BE PATRIOTIC. I WON'T HAVE THAT MISJUDGMENT AGAIN. I FELT STUCK AT FIRST BUT THEN REALIZED THAT THIS IS NOT AN ACCEPTABLE CONCLUSION. GMC NEEDS TO STAND BEHIND WHAT THEY HAVE BUILT."

- NHTSA Complaint on February 11, 2017 for 2010 Chevrolet Equinox-"THE VEHICLE WAS IN MOTION, ACCELERATING ON A FREEWAY ENTRANCE RAMP. AS I WAS MERGING. THE ENGINE LOST POWER AND STARTED A LOUD KNOCKING NOISE. I COULD NOT ACCELERATE. STARTED SLOWING, BUT WAS ABLE TO GET TO THE SHOULDER. I HAD THE VEHICLE TOWED TO THE NEAREST CHEVY DEALER, WHERE A QUICK DIAGNOSIS WAS THAT THE ENGINE HAD FAILED, AND WOULD HAVE TO BE **REPLACED. THIS ENGINE HAS HAD 2 WARRANTY REPAIRS** RELATED TO OIL ISSUES (8/2011 AND 8/2014). IN BOTH CASES THE TIMING CHAINS, TENSIONER, GASKETS AND SEALS, ETC. WERE REPLACED, ALSO, IN 2014 THERE WAS A RECALL TO REPROGRAM THE OIL LIFE MONITOR. THERE WAS A RECALL LETTER IN SEPTEMBER. 2014 REGARDING EXCESSIVE ENGINE OIL USE DUE TO PISTON RING WEAR CAUSED BY THE PREVIOUS ISSUES. THIS CONDITION WAS TO HAVE AN EXTENDED WARRANTY OF 10 YEARS OR 120,000 MILES. I BLAME THE ENGINE FAILURE AS AN EXTENSION OF THESE OIL RELATED ISSUES, WHILE CHEVY SAYS 'NO"."
- <u>NHTSA Complaint on October 10, 2017 for 2010 Chevrolet Equinox:</u> "GM IS AWARE OF AN OIL CONSUMPTION ISSUE ON

2010MY+ CHEVY EQUINOX AND GMC TERRAIN WITH THE 2.4L ECOTEC ENGINE. THEY HAVE SO FAR ISSUED SERVICE BULLETINS FOR 2010-2012MY TO REPLACE THE PISTON RINGS AND TIMING CHAIN BECAUSE IN THIS SITUATION, THE TIMING CHAIN CAN STRETCH CAUSING IT TO SKIP SEVERAL TEETH AND CAUSE ENGINE DAMAGE. I COMPLAINED ABOUT EXCESSIVE OIL CONSUMPTION (1 QUART EVERY ~1000 MILES) TO THE DEALER. THE DEALER IS INSTRUCTED TO DO AN OIL CONSUMPTION TEST BY GM. 200 MILES AFTER WE BEGAN THIS OIL CONSUMPTION TEST, I STARTED THE CAR ONE MORNING AND THERE WERE LOUD SOUNDS COMING FROM THE ENGINE COMPARTMENT. I CALLED FOR A TOW TO THE DEALER AND THEY SAID THE ENGINE WAS SEVERELY DAMAGED AND A NEW ENGINE IS RECOMMENDED. GM DOESN'T WANT TO TAKE OWNERSHIP FOR THIS KNOWN ISSUE. BULLETIN SB-10058791-5041"

- <u>NHTSA Complaint on October 10, 2017 for 2013 Chevrolet Equinox</u>: "THE ENGINE OF MY CHEVROLET EQUINOX HAS BEEN BURNING OFF WAY TOO MUCH OIL. I HAVE SEEN ONLINE THAT THIS IS AN ISSUE WITH MANY EQUINOXS. AFTER TAKING IT INTO THE DEALERSHIP, I WAS TOLD THAT THE PISTON RINGS ARE NOT SEALING, AND THUS LETTING MORE OIL THROUGH TO BE BURNED. THE ESTIMATED COST FOR REPAIR IS 3300 DOLLARS. CONSIDERING IT IS AN ENGINE FAILURE, GM SHOULD BE ON THE LINE FOR THAT COST. IT IS ALSO DANGEROUS, AS NO CHECK ENGINE LIGHT CAME ON WHEN MY OIL WAS DRAMATICALLY LOW LONG BEFORE I WAS DUE FOR AN OIL CHANGE. OVERALL A DANGEROUS FACTOR."
- <u>NHTSA Complaint on September 12, 2017 for 2011 Chevrolet</u> <u>Equinox:</u> "#43180: VOLUNTARY PRODUCT EMISSION RECALL – HIGH PRESSURE FUEL PUMP – (SEP 30, 2016) CAR STALLS AFTER IDLING WHEN PULLING OUT OF PARKING LOT OR IN A SLOW START UP OR TRANSITIONING FROM REVERSE TO DRIVE. CAUSING THE VEHICLE TO LOSE POWER AND MANEUVERABILITY. THE ENGINE MOUNTED HIGH PRESSURE FUEL PUMP IN THESE VEHICLES MAY DEVELOP EXCESSIVE WEAR ON THE PLUNGER PISTON SHAFT AND SHAFT SEAL. IF THIS HAPPENS FUEL CAN LEAK INTO THE ENGINE OIL CRANKCASE AND RESULT IN THE ENGINE RUNNING ROUGH AND ILLUMINATION OF THE

MALFUNCTION INDICATOR LAMP. THE ISSUE HAS BEEN ONGOING FOR PAST SEVERAL YEARS."

- <u>NHTSA Complaint on May 15, 2015 for 2013 Chevrolet Equinox</u>: "THE ENGINE BURNS ABOUT A QUART OF OIL PER 1000 MILES. WE HAD A DEALER LOOK INTO IT, INCLUDING A DIP TEST EVERY 500 MILES. THEY FOUND THAT IT IS INDEED BURNING OIL, AND SAID DUE TO LOW TENSION RINGS AND SHORT SKIRT PISTON, THIS WAS NORMAL. I'M NO MECHANIC, BUT 3 QUARTS OF OIL PER NORMAL OIL CHANGE INTERVALS SEEMS REALLY EXCESSIVE. IT'S BEEN LIKE THIS PRETTY MUCH SINCE WE BOUGHT IT NEW. I GUESS IT COULD BE SAFETY RELATED BECAUSE SEVERE OIL CONSUMPTION COULD CAUSE A FIRE."
- <u>NHTSA Complaint on August 15, 2017 for 2011 Chevrolet Equinox:</u> "DEALER LOOKED AT IT, IT USES OIL THEY SAY THERE IS AN ISSUE WITH STRETCHED TIMING CHAINS AND PISTON RINGS, WHICH COMPANY HAS ADMITTED THERE IS A PROBLEM WITH. BRANDED TITLE IS STOPPING THE FIXING OF PROBLEM. ONLY ISSUE TO MAKE TITLE BRANDED WAS BUMPER AND AC UNIT ISSUES(HAD TO DO WITH THE INSURANCE COMPANY IN THE STATE IT HAPPENED IN). THERE WASN'T ANY DAMAGE TO ENGINE / MOTOR. GM WILL NOT STAND BEHIND THERE PRODUCT LIKE THEY CLAIM. THEY ALREADY ISSUED THIS POLICY #15285, THEY SHOULD HONOR THE FIX!! - REGARDLESS! VEHICLE IS 2011 WITH ONLY 67,000 MILES. CALLED GM CUS. SUPPORT, AS TOLD BY DEALER, THEY COULDN'T HELP. REPORT # 8-3169085035"
- <u>NHTSA Complaint on June 26, 2017 for 2012 Equinox</u>-"WE BUY THIS CAR FROM CHEVROLET COMPANY ON NOVEMBER 14,2011.

SINCE THAT TIME THE CAR WAS NOT IN OFTEN USE. UP TO ONE YEAR IT IS WAS IN THE STORAGE

WHEN WE BEGAN TO USE IT REGULAR WE NOTE THAT THE ENGINE HAS SOME FACTORY DEFECT, THE ENGINE OIL IS OFTEN DID NON RECEIVE TO EVEN 5000 MILES, AT THE 2500 MILES ESTIMETELY, WE WERE FORCE TO ALWAYS CHANGE OIL, THE OIL COLOR OF THE ENGINE WAS ALWAYS VERY BLACK AS DIRTY, WE ALWAYS WERE WONDERING, WHY THE COLOR OF THE ENGINE OIL IS TURNS VERY BLACK, LIKE WE DID NOT CHANGED IT FOR LONG TIME."

- NHTSA Complaint on May 31, 2017 for 2012 Chevrolet Equinox-"BOUGHT USED AND THEN STARTED NOTICING OIL DISAPPEARING. TOOK TO DEALER, OIL CONSUMPTION TEST DONE, DEALER SAYS NORMAL USE. NO HELP FROM THE DEALER AT ALL. CONSUMPTION GOT WORSE, WENT FROM 2 QUARTS TO 4 QUARTS BETWEEN OIL CHANGES. IN HAD THE MEANTIME TO REPLACE CATALYTIC CONVERTER AND A CRACKED EXHAUST MANIFOLD AND NOW HAVE A CHECK ENGINE LIGHT INDICATING O2 SENSOR PROBLEM, GAS MILEAGE DROPPING TOO. AFTER RESEARCHING, THESE PROBLEMS SEEM TO BE CAUSED BY THE OIL USE ISSUE. ENGINE PROBABLY NEEDS NEW RINGS AND PISTONS (\$2500 AT THE DEALER) BUT OTHER INTERNAL DAMAGE MAY BE PRESENT SO COST MAY BE EVEN MORE. I FOUND ON THE INTERNET THAT GM HAD EXTENDED WARRANTY FOR THIS ISSUE BUT ONLY UP TO 7 YRS OR 120K MILES. SO. I AM OUT OF LUCK AND DEALER DID NOT MENTION THIS AS THIS STARTED WHILE STILL UNDER 120K MILES. CONSULTED A HONEST MECHANIC FRIEND AND HE SAYS IT WOULD BE CHEAPER TO REPLACE THE ENGINE. HE OUOTED \$1800 FOR ENGINE AND LABOR. TURN KEY JOB, WITH A ONE YEAR WARRANTY ON EVERYTHING. I TRUST HIM. ONLY CHOICE IS TO REPLACE ENGINE OR GET RID OF THE CAR."
- NHTSA Complaint on May, 26 2017 for 2012 Chevrolet Equinox-• "THIS VEHICLE HAS KNOWN OIL CONSUMPTION ISSUES. IN APRIL 2016 THE VEHICLE WAS LURCHING AND SHAKING. DURING SERVICE OF THE VEHICLE THEY STATED THE OIL WAS LOW, WHICH HAS BEEN ON ONGOING ISSUE. WE WERE ADVISED TO BRING IT BACK IN AUGUST FOR AN OIL CONSUMPTION TEST. WE TOOK IT IN FOR THE OIL CONSUMPTION TEST. NOW IN MAY 2017 WE ARE EXPERIENCING THE SAME ISSUES. INTERESTINGLY ENOUGH THE DEALERSHIP NOW HAS NO RECORD OF THE OIL ISSUES, INCLUDING THE OIL CONSUMPTION TEST. THE DEALERSHIP RUMMAGED THROUGH THE GLOVE COMPARTMENT AND STATED THE VEHICLE WAS ONLY GETTING OIL CHANGES EVERY 6000. IN FACT, NOT ALL TO THE OIL CHANGE RECEIPTS GO IN THE GLOVE COMPARTMENT. WE BELIEVE GM IS ATTEMPTING TO HIDE

THE ISSUE. ULTIMATELY THE VEHICLE WILL LURCH AND CAUSE PERSONAL INJURY OR PROPERTY DAMAGE."

- NHTSA Complaint on May 5, 2017 for 2012 Chevrolet Equinox: "THE CONTACT OWNS A 2012 CHEVROLET EQUINOX. WHILE DRIVING 55 MPH, THE VEHICLE RATTLED AND MADE A HOST OF NOISES, WHICH INDICATED THAT THERE WAS NO OIL IN THE VEHICLE. THE CONTACT STATED THAT TWO QUARTS OF OIL WERE PLACED IN THE VEHICLE, BUT IT PREMATURELY DISSIPATED BEFORE THE INTENDED MILEAGE MARK. THE CONTACT STATED THAT OIL WAS ADDED TO THE VEHICLE THREE TIMES IN A SHORT PERIOD OF TIME. THE VEHICLE WAS TAKEN TO THE DEALER WHERE IT WAS DIAGNOSED THAT THERE WAS AN OIL CONSUMPTION FAILURE. THE VEHICLE WAS NOT REPAIRED, BUT THE CONTACT MADE AN APPOINTMENT WITH THE DEALER. THE MANUFACTURER WAS NOT MADE AWARE OF THE FAILURE. THE FAILURE MILEAGE WAS 91,000."
- NHTSA Complaint: [2012 Chevy Equinox]-"ON APRIL, 13 2017, MY WIFE WAS EXITING THE HIGHWAY ON THE WAY HOME FROM WORK. THE VEHICLE IMMEDIATELY SLOWED AND SHUT DOWN NEARLY CAUSING HER TO BE RUN OVER BY A SEMI-TRACTOR BEHIND HER. BECAUSE THE CAR COULD NOT BE RE-STARTED, I HAD IT TOWED TO MY USUAL MECHANIC. HIS DIAGNOSIS SHOWED IT HAD A TIMING CHAIN FAILURE WHICH TORE UP THE UPPER END OF THE MOTOR. IN HIS EXPERIENCE SUCH DAMAGE WAS THE RESULT OF OIL ISSUES. THIS CAME AS A GREAT SHOCK TO MEASURE I REGULARLY CHANGE THE OIL EVERY 3000 MILES. I WENT HOME THAT NIGHT AND BEGAN TO RESEARCH THIS PROBLEM AND HAVE FOUND THAT THIS IS NOT A RARE OCCURRENCE WITH THIS MOTOR. I WOULD HAVE TO ADD FROM 1-3 QUARTS OF OIL BETWEEN CHANGES BUT BECAUSE THERE WERE NO BULLETINS OR RECALLS I WAS TOLD I WOULD JUST HAVE TO DEAL WITH IT. SO I GUESS I NEED TO KNOW HOW MANY OF THESE VEHICLES HAVE TO DIE IN TRAFFIC OR PEOPLE HAVE TO DIE OR BE INJURED BEFORE SOMEONE TAKES NOTICE. I WILL HAVE TO REPLACE MY MOTOR (OVER \$5000) AND GM KNOWS THESE PROBLEMS EXIST. IT WAS JUST A MATTER OF TIME. AND TO ADD INSULT TO INJURY, GM EXPECTS ME TO HAVE THE VEHICLE TOWED TO THEIR FACILITY AT MY EXPENSE SO THEY CAN CONFIRM THE DIAGNOSIS. IF THE

DIAGNOSIS IS CONFIRMED, THEN I'LL HAVE TO TOW IT BACK TO MY GUY SO HE CAN FIX IT. ANOTHER \$200 BUCKS. ONCE AGAIN, DOESN'T ANYONE MONITOR THE INTERNET ABOUT THIS STUFF? PEOPLE GET SO WHEN FRUSTRATED DEALING WITH LARGE CORPORATIONS, THEY HAVE NO CHOICE BUT TO SHARE THEIR STORIES WITH INDEPENDENT SOURCES. AND GM SURELY WON'T INCUR ADDITIONAL EXPENSES WITHOUT GOVERNMENT SCRUTINY. WE'VE LEARNED THAT THE HARD WAY. I JUST WANT THEM TO DO THE RIGHT THING. ADMIT IT WAS A PROBLEM-PLAGUED MOTOR AND FIX IT. FOR THANK YOU YOUR TIME."

- <u>NHTSA Complaint on April 13, 2017 for a 2012 Chevrolet Equinox</u>-"GOES THROUGH 4 QUARTS OF OIL BETWEEN OIL CHAGES WHICH ARE DONE EVERY 3 THOUSAND MILES. OIL LIGHT DOES NOT COME ON WHEN YOU ARE 3 QUARTS LOW."
- <u>NHTSA Complaint on October 8, 2016 for a 2012 Chevrolet Equinox</u>-"TL\* THE CONTACT OWNS A 2012 CHEVROLET EQUINOX. THE CONTACT STATED THAT THE CHECK OIL ENGINE WARNING INDICATOR ILLUMINATED. THE CONTACTED ASSUMED THAT THE OIL NEEDED TO BE CHANGED. THE VEHICLE WAS TAKEN TO THE DEALER WHERE IT WAS DIAGNOSED AS EXCESSIVE OIL CONSUMPTION. THE VEHICLE WAS NOT REPAIRED. THE MANUFACTURER WAS MADE AWARE OF THE ISSUE. THE FAILURE MILEAGE WAS 94,000."
- <u>NHTSA Complaint on March 2, 2017 for a 2012 Chevrolet Equinox</u>: "CHECK ENGINE LIGHT CAME ON. CAR HAD BEEN IDLING ROUGH AND WOULD ALMOST STALL OUT AT RED LIGHTS. ALSO MADE A TICKING NOISE WHEN PRESSING ON THE ACCELERATOR AT ABOUT 20-25 MPH. I TOOK IT TO THE MECHANIC AND HE FOUND THE OIL LEVEL LOW. PERFORMED AN OIL CHANGE AND CLEARED THE DIAGNOSTIC CODE. HE ALSO GAVE ME INFORMATION PERTAINING TO THIS EXCESSIVE OIL CONSUMPTION BULLETIN. NOW I WILL HAVE TO CHECK MY OIL LEVEL AND MAKE SURE TO GET AN OIL CHANGE EVERY 3000 MILES."
- <u>NHTSA Complaint on April 03, 2017 for a 2013 Chevrolet Equinox</u> "USING WAY TO MUCH OIL. VERY DISAPPOINTED. I BUY A CAR TO KEEP LONG TERM. PRETTY OBVIOUS THIS

PROBLEM WAS WELL KNOWN BY AUTOMAKER. I WAS NEVER NOTIFIED. WILL NEVER BUY A GM AGAIN!!!!"

- <u>NHTSA Complaint on March 16, 2017 a 2013 Chevrolet Equinox</u>: "I HAD 100,000 MILES ON MY CHEVY EQUINOX AND IN DECEMBER WITH OUT WARNING THE ENGINE BLEW UP. I HAD RECENTLY HAD A OIL CHANGE BUT WAS TOLD THE ENGINE BARELY HAD ANY OIL. I HAD ARRIVED AT A DOCTORS OFFICE WAS THERE FOR A HOUR AND WHEN I WENT TO START MY CAR IT WAS COMPLETELY DEAD. I HAD TO REPLACE THE ENGINE."
- NHTSA Complaint on March 20, 2015 for a 2013 Chevrolet Equinox: "TL\* THE CONTACT OWNS A 2013 CHEVROLET EQUINOX. WHILE DRIVING AT AN UNKNOWN SPEED, A LOUD ABNORMAL TICKING SOUND EMITTED FROM THE VEHICLE WITHOUT WARNING. THE VEHICLE WAS TAKEN TO A DEALER WHERE IT WAS DIAGNOSED THAT THERE WAS NO OIL IN THE VEHICLE. THE TECHNICIAN PERFORMED AN OIL CHANGE AND COMPRESSION TEST EVERY 1,000 MILES. THE CONTACT WAS INFORMED THAT THE PISTON IN THE ENGINE FAILED AND NEEDED TO BE REPLACED. THE VEHICLE WAS REPAIRED, BUT THE FAILURE RECURRED. THE VEHICLE WAS TAKEN TO AN INDEPENDENT MECHANIC WHERE THE TECHNICIAN STATED THAT THE VEHICLE WAS BURNING OIL RAPIDLY. THE VEHICLE WAS NOT REPAIRED. ON ANOTHER OCCASION, THE VEHICLE FAILED TO SHIFT GEARS PROPERLY. THE VEHICLE WAS TAKEN TO THE DEALER WHERE IT WAS DIAGNOSED THAT THE TRANSMISSION NEEDED TO BE REPLACED. THE TRANSMISSION WAS REPAIRED WITH UNKNOWN PARTS. THE CONTACT ALSO STATED THAT THE WINDSHIELD WIPERS FAILED TO OPERATE INTERMITTENTLY. THE VEHICLE WAS NOT DIAGNOSED OR REPAIRED. THE MANUFACTURER WAS NOT NOTIFIED OF THE FAILURE. THE FAILURE MILEAGE WAS 33,000."
- <u>www.carcomplaints.com on July 10, 2015 for a 2012 Chevrolet</u> <u>Equinox</u>: I had the exact same issues as everyone else. The 2012 Equinox started to sound like an old Model T and would die at red lights. I took to our mechanic and he said there was no oil in the car! He called the Chevy rep for us which came to look and told him we needed a new engine because we let it run with no oil. Our mechanic said well I change their oil every 5,000 miles so I know that's not true.

The rep said they need to be changing every 1,000 miles! We could not believe it so I called Detroit. GM said this was normal and my husband should be putting oil in it all the time. We went with a brand new engine because were told if we put an old one in the same thing would happen again. Once its paid off it will be gone! We will never buy another Chevrolet again! Now my daughter drives it, we taught her how to check the oil and add if needed! OMG REALLY????

- <u>www.carcomplaints.com on September 15, 2009 for a 2010 Chevrolet</u> <u>Equinox:</u> "Amazingly, after several trips to Len Stoler for an oil consumption test. they said that it never used more then a quart of oil per thousand. I decided to check their honesty. I drained and oil and made sure it was 1.5 quarts low. Amazingly according to Len Stoler, it didn't use more then a quart. That's when I stopped taking it for the oil consumption test."
- <u>www.carcomplaints.com on November 27, 2009 for a 2010 Chevrolet</u> <u>Equinox:</u> "I have 80,000 miles on my car at this point. However, this oil consumption has been happening since I have owned the car. I have asked why my car runs so rough no one seems to know. Luckily I get my oil changed every 3000 miles, however no one until recently noticed I have no oil in my engine at that time. Although they are fixing it this is not the only thing I have had wrong."
- www.carcomplaints.com on September 1, 2010 for a 2010 Chevrolet . Equinox: "What kind of engine burns a litre (quart) every 1000km (620miles)? A 2.4L 4cyl piece of garbage from GM, that's what kind! Maybe the engine just needs to be broken in. Nope, that's not it. Maybe it needs synthetic. Nope, not that either. The geniuses at my dealership were pretty stumped when I approached them back in 2010 with this problem. They told me I had to do something called an "oil report" to confirm that it was burning oil. Cause that's something that people lie about? Regardless, This process involves me driving out of my way to the dealership everytime I get low on oil - which is about every 2nd tank of gas. What if I'm out of town? "Well...try to get topped up before you go". Right, because I have time for that. Huge inconvenience? Absolutely. Apparently this oil report was a huge inconvenience for them as well. Every time I showed up at the dealership to get oil added, they treated me like a second class citizen. So I gave up on the oil report and resigned myself to adding a litre at every 2nd fill up. Now, 4 years later I read online that some people are getting their engines replaced as a result of excessive oil consumption! Thanks CARCOMPLAINTS.COM! I'll be working on my dealership to replace my engine. Then I will be trading in my Equinox for an import."

www.carcomplaints.com on April 2, 2010 for a 2010 Chevrolet Equinox: "As a consumer that works extremely hard for her \$\$\$ I'd like to for warn you about what your future could hold if you purchase a brand new vehicle with GM Canada. I bought the 2010 Chevy Equinox – base model, no extras, brand new. I really love(d) this car, I was beyond happy with the look, the drive, everything ... that is until 20,000km hit when my car began to sound like it had a diesel engine. I worked very closely with my dealership for the next several months to try and determine the cause. They changed belts and did other small repairs, however the engine continued to always go back to this noise? One day I was driving the vehicle and it began to shake vigorously at a stoplight, so I went straight to the dealership and they told me my car had no oil in it?! Weird, the oil light never came on! Nor did the engine light, yet the car was on the verge of the engine seizing – scary! So those sensors, don't depend on them! I'm glad I was city driving, and not on the highway that day. When I returned 2 days later for an oil change - I was told the car had a major oil leak. I live in a new home, new driveway – and there was no oil on the ground. Where is all this oil going? So I went on an oil consumption report to help GM understand the issue. For 10,000km I had to visit the dealership every 1000km so that they could monitor the issue. This is my oil history: June  $30th - 2\frac{1}{2}$  liters added July 2nd – Engine required shampooing due to excessive oil leak, dye ball placed in oil tank to determine were the oil came from. July 12th – Drop off car for overnight service to determine were the oil was leaking from July 13th - Told a part has been ordered, gasket cover broke and needed to be replaced, once done I'll go back on the oil consumption report. Still very concerned that I'm being told I had a massive leak yet no trace of oil on my driveway? July 26th – add 500ml of oil Aug – 1.5 liters added, GM recommends decarbonizing before taking engine apart Aug 22nd – drop off car for the decarbonizing, pick up then come back in 1000km Sept 8th -350ml added, told I may need to have the engine pulled apart Sept 20th – Was told the car was fine, no oil burned Oct 7th – 1.5L added, told to call my service adviser on Monday to schedule the drop off and get me in a rental so they can take a part the engine. I truly believe that because this issue clearly began back at 20,000km I voiced that I did not want them to rebuild, instead I wanted them to replace the engine. I've put so much money into maintaining the car that I felt it was only fair, but GM said their policy is to take apart the engine to find the problem. I once again voiced my concern that the oil & engine light did not come on, they said they'll look into it. I also would like them to tell me if the line my vehicle came off of, has anyone else experienced this issue? Because I've read other people's blog's saying they had the same problem I'm having so I'm wondering, did their car come from the same line as mine? I told them the reason I wanted (and felt I deserved) a new engine was because of the maintenance I've put

into trying to prolong the life of the car by doing all recommended service. If you take the fact that the issue began at 20,000km and I'm now at 65,000km and its still occurring, plus the fact that they have no idea why it's burning oil, how can they be sure it hasn't caused any other damage to my engine? I'm not a service technician so how do I know that this oil issue isn't contributing or causing other strains that may not be visible now however could develop down the line from this unknown reoccurring problem? If I didn't do all the recommended service I'd be ok ... well not ok, but I'd understand the rebuild. But why did I pay for all that extra service? To me this appears to be a manufacturer's defect (unknown burning oil/censers don't respond) and not regular wear and tear. I mean, hey, if the oil in your vehicle wasn't an important factor, why do we all do oil changes? Aren't we all told that by not doing oil changes along with other maintenance were decreasing the life of a vehicle? Yet I was told by GM Customer Care - "Ma'am, the issue will be noted on file for future reference" that's reassuring, right? So, now, after I've been able to share my story I hope this helps you in your decision in purchasing a new GM, or any new car for that matter. I always tell myself to learn from my misfortunes and today I've learned that when I'm thinking about buying another vehicle I will buy used, for sure. If I knew that buying new would provide me with this kind of service and reliability I would have definitely explored more options. I made the mistake of thinking that by buying a new vehicle I would have assurance that I would have a reliable vehicle, and that with maintenance I could hopefully get a good life out of the car, for my family. I was mistaken. <sup>(a)</sup> P.S. If I'm wrong PLEASE educate me cause I have no idea how cars work, I'm basing my feeling purely on business, product and ethics, so I'd love some feedback - bad or good please."

• <u>www.carcomplaints.com on May 27, 2015 for a 2012 Chevrolet</u> <u>Equinox</u>: "I had 2 oil consumption tests done in 2015 before 100,000 miles and was told both times that my car "met the specs". I have to travel around with quarts of oil in my car because I constantly have to check the oil and fill it up.

I recently received a letter from Chevrolet stating that they now acknowledge an oil consumption problem with this model year Equinox. My problem is I now have 138,000 miles and the fix is for vehicles with less than 120,000 miles. Neither my car dealership (Anoka MN) or Chevrolet are willing to fix the problem because I now have over 120,000 miles, even though I was having the problem below 100,000 miles.

I am definitely angry about this and am going to go to the top to address this issue. I'd like to know why 120,000 miles is the "magical

number" for mileage. I am looking for a new vehicle and will not buy an Equinox and will not by a Chevrolet. I feel I have not been dealt with fairly."

- <u>www.carcomplaints.com on June 6, 2017 for a 2012 Equinox-</u>"I BOUGHT A 2012 CHEVROLET EQUINOX WITH APPROX 2000 MILES AT TIME OF PURCHASE. AROUND 20,000 MILES I NOTICED IT USING OIL BETWEEN OIL CHANGES. TOOK IT TO CHEVROLET IN 2015, TOLD THEM THE PROBLEM. THEY REPLACED THE SEAL WITH OIL FILTER. THE LAST YEAR IT HAS STALLED, ENGINE KNOCK AND STILL USING MORE OIL. I GOT A LETTER MAY 2017 SAYING I NEED TO TAKE THE EQUINOX TO CHEVROLET DEALER IF I HAVE ANY PROBLEMS STATED IN THE LETTER, WHICH I HAVE AND STILL DO. THEY TOLD ME I HAD TO DRIVE IT 500 MILES, BRING IT BACK TO DO A ENGINE OIL PRESSURE TEST. AM STILL DRIVING IT. AFRAID TO BUT VERY WORRIED AND CONCERNED ABOUT THIS PROBLEM."
- <u>www.carcomplaints.com on December 2, 2015 for a 2012 Chevrolet</u> <u>Equinox: "The problem started around late 2015 had almost 100,000</u> miles on the car started using more oil than usual. Didn't think there was a problem but it got worse as time went on started adding two quarts of oil between oil changes. Now I'm up to 3 quarts of oil between oil changes I didn't realize there was a problem until I got a letter from GM saying that they would repair the problem. But now I have a 148000 on the car and it's out of warranty, so now what do I do."
- <u>www.carcomplaints.com on October 1, 2016 for a 2012 Equinox-"</u>I own a 2012 Equinox LS. I bought the vehicle used with only \$25,000 miles. At around \$35,000 miles the timing chain had to be replaced. Shortly after I had to start an oil consumption test, the vehicle was not running well and the engine was ticking. No oil on the dipstick and vehicle was not even close to the next oil change due. I'm now at \$44,000 miles and still doing the oil consumption test.

This time the Engine is knocking very loudly, no oil on dipstick again, yellow bubbly fluid and the smell of gas. Dealer tops it off - down 3 quarts this time. Come back again between \$1,500 and \$2,000 miles.

I was told by the dealership that GM has a special warranty for the engine in the 2012 Equinox because they are aware of the problem. I was told the pistons are probably bad - and this was said to me when we first started the oil consumption test, but I need to do this test in order to prove to GM there is a problem. Hoping this is true.

At this point I'm very aggravated and worried the engine will go one day while I'm driving."

- <u>www.carcomplaints.com on February 28, 2017 for a 2012 Equinox-"I</u> purchased my 2012 Equinox new, late in 2011. It now has just over 80,000 miles. I have done all routine maintenance on the vehicle but a couple days ago the check engine light came on... so I brought it in for service at my dealer. I was told that my vehicle had NO oil... nothing was registering on the dip stick at all! I was told that this is a prevalent problem with this make and model... that I needed to check my oil every 1000 miles now and that I may need to get my pistons etc.. replaced. Estimate...\$2500.00 ! That was yesterday... and today the same check engine light is on. OnStar diagnosis today... same problem. In reading the same problem over and over again on this site, something needs to be done and there needs to be a recall!"
- <u>www.carcomplaints.com on August 20, 2016 for a 2012 Chevrolet</u> <u>Equinox -"</u>I bought this car about 2 years ago and for some reason every time I check the oil, the oil is low, even after an oil change. This is ridiculous. I just don't understand how a car consumes oil. I took it to the dealership and they don't understand why it does that. I took to the mechanic to check for leaks, nothing. So where the hell is the oil going if its not leaking? I wish I knew this before I bought this car because I see big problems with this in the future because my wife drives this car and she doesn't know anything about cars. She takes my kids to daycare every morning. I keep up with all maintenance that needs to be done, but I have a feeling my heads are going blow or something bad is going to happen if this problem is not resolved."
- www.carcomplaints.com on June 1, 2015 for a 2012 Equinox-"We • purchased a used 2012 Chevrolet Equinox used in early 2015 with a little over 27,000 miles showing on the odometer and were well pleased with vehicle at the time. About a thousand miles later, I was checking the oil and noticed it was low...had to add about 1/2 quart or so to top it off. I thought this was unusual since it just had a fresh change when we bought it. When I changed the oil about three thousand miles later, it was almost a quart low then. The engine now has a little over 45,000 miles on it and I'm having to add about 1-2 quarts in between oil changes, which is ridiculous for a modern engine. Searching through the internet tonight, I'm seeing this is a common issue for these engines that is being blamed on a faulty engineering piston / ring / timing chain design. Has anyone else had any luck getting GM to stand behind their product and correct the problem or am I just stuck with keeping a case of oil around all the time? I'm going to make it my life's calling to tell everyone about this

and warn them off this vehicle. We've always bought Ford products in the past and I was hesitant about buying a Government Motors product, wished now that had trusted my gut on this purchase."

- <u>www.carcomplaints.com on July 1, 2016 for a 2012 Chevrolet</u> <u>Equinox</u> Do not buy this vehicle. First day I bought it we had to get the timing chain replaced. The check engine light stays on. A part that had to do with the gas had to be replaced. Now I am dealing with the engine oil consumption issue. BTW the warranty is up at 100,000 mine is at 128,000. I'm burning a quart a week.
- <u>www.carcomplaints.com on June 1, 2014 for a 2012 Chevrolet</u> <u>Equinox</u> This car uses excessive oil. I drive several miles a day. I have mentioned this to the local dealer and they gave me a list of items to "fix" which cost several thousand dollars. I have to monitor my own oil because the oil light does not come on when it is real low. It does come on when it is time for the oil to be changed. I have owned several Chevrolet vehicles but this one has caused me the most problems. I have called and there does not appear to be a recall or legitimate explanation as to why the car uses so much oil. I do not have a leak on the ground.
- <u>www.carcomplaints.com on July 17, 2015 for a 2012 Chevrolet</u> <u>Equinox Since the day I bought this vehicle, it has eaten oil. I drive</u> the car about 100 miles a day and have to add at least 2 quarts a week. I have spoken to other Equinox owners and they all seem to have the same issue. Around a quart for every 1000 miles.
- <u>www.carcomplaints.com on December 15, 2017 for a 2012 Chevrolet</u> <u>Equinox</u> This car has used a quart of oil every 1000 miles from day one....mentioned to my mechanic at regular scheduled oil changes and was always told it was normal. Upon looking into my constant complaint my mechanic recommended to file a complaint as this oil consumption seems to be a big problem. This should be recalled if Chevy was reputable. This is the second Chevy and probably the last I will purchase, as much as it cost to purchase a nice vehicle you should not have to deal with these big issues from day one. Engine should be recalled and replaced, not at the owners expense.
- <u>www.carcomplaints.com on June 16, 2016 for a 2012 Chevrolet</u> <u>Equinox-"</u>Wife was driving to work and car stopped on highway wouldn't start. She called me crying because she loves that car. Got it to the local dealership and said it had no oil. Told them there is no way that I just checked it a few days ago and topped it off. They tell me those engines are bad for going through oil and that the warranty won't

fix the problem because all my paper work got thrown away. If GM knows about the oil problem in these wouldn't you think they would make it right? GM is garbage vehicles, don't buy anything GM."

- <u>www.carcomplaints.com on June 20, 2016 for a 2012 Chevrolet</u> <u>Equinox: "We just found out that the Equinox is known for burning</u> excess oil. We never expected to have to check the oil frequently on a new vehicle. The engine light came on so my husband checked the oil, as it was due for an oil change, and there was no oil on the dipstick! He immediately took it the next morning to the dealership in Washington, IL. They told him that GM is aware of the problem and will replace the engine. How long have we been driving it with no oil in it? It doesn't say that the oil level is low. The engine has to be ruined! We won't be buying another Chevy.. We have to check the oil every 1,000 miles until the next oil change. If it qualifies as a problem we will get a new engine. On a fairly new car...Really??"
- <u>www.carcomplaints.com on November 11, 2015 for a 2012 Chevrolet</u> <u>Equinox: "Suddenly I noticed a rattling sound that got worse over</u> time. I was leaving work when a co-worker heard the noise, came over and popped the hood to check the oil level. The stick was dry! He asked me to go into the shop (I work at a dealership Not Chevrolet) so he could put some oil in for me. He put in two quarts and said come in tomorrow for a more thorough check. Engine was down three quarts. Gave me a complete oil change and sent me on my way.

Here it is Feb and the same thing happened. Down four quarts of oil! Taking it to Chevy for the inevitable run around. I've dealt with them before for other issues. Never a solution. The service writers always give me the feeling that I am someone to avoid like the plague and I get never a solution. It's all in my head. Never again will I buy a Cherolet. #mycheysucks"

• <u>www.carcomplaints.com on April 15, 2015 for a 2012 Chevrolet</u> <u>Equinox-"</u>I purchased this 2012 Chevy with intentions of it being my last car. I normally purchase foreign cars because I strongly believe in the engines. This car burns all of the oil after an oil change in less than 30 days. I have my car serviced on 4/17/2015 and after checking oil before a road trip on 5/11/2015 it was barely on dipstick. After driving to Atlanta less than 300 miles I had to add more oil. Using synthetic blend gets expensive. I would never recommend this car to anyone. The dealer is not at fault but Chevy is because they have received numerous complaints. They claim bad oil rings and can be repaired for approx. \$2500"

- <u>www.carcomplaints.com on June 26, 2015 for a 2012 Chevrolet</u> <u>Equinox: "We noticed our engine was rattling and decided we should</u> check the oil. It was down 2 quarts so we added oil and since it was about time for an oil change, we had it changed. We are now 3,000 mile into this oil change and have already added oil. We will be contacting the dealership to see it there is a fix for this that isn't going to cost us an arm and a leg. There is now 72,332 miles on this engine and we us Royal Purple Performance synthetic oil."
- <u>www.carcomplaints.com on June 25, 2015 for a 2012 Chevrolet</u> <u>Equinox-"</u>I was a victim of the excessive oil consumption problems that, I now understand are common with the Chevy Equinox. I did not know that the oil was low, which I had the road and called AAA. changed approx 4000 miles before. I first became aware of the problem when my engine would stop each time I stopped at an intersection. I was on the way to my repair garage when I heard a rather loud noise coming from the engine compartment. Pull over to the side of Car was towed to my normal service garage. My mechanic could not help so I had the car towed to Lawrence Chevrolet in Mechanicsburg, Pa. A diagnostic check was made and the dealership said that I needed a new engine and that my warranty would not cover the cost of the repairs. Estimated costs to me would be about \$6000. I did not authorized the dealership to fix the vehicle due to the cost. Now looking for another way to get the problem fixed."
- <u>www.carcomplaints.com on December 1, 2014 for a 2012 Chevrolet</u> <u>Equinox-"</u>I will never buy another Chevy in this lifetime. I will also let everyone I come in contact with know about this issue. My 2012 Chevy Equinox (JUNK) has about 1,500 miles on the new Dexos (Recommended Oil) It sounds like a diesel, dies at red lights, and if I check the oil level there isn't one! Problem here? Absolutely! Will Chevy cover this under their "100,000 mile powertrain warranty? NO! Is this false advertisement on their part? YES! My advice to everyone out there. DO NOT BUY A CHEVY OR ANY OTHER VEHICLE THEY ARE AFFILIATED WITH! CHEVROLET IS JUNK!!!! Thank you for reading! Rant over because it is a waste of my breath to talk any more about this auto maker!!!!"
- <u>www.carcomplaints.com on November 1, 2012 for a 2012 Chevrolet</u> <u>Equinox "The car uses about 1-2 quarts between oil changes, which</u> Chevy recommends at 7,500 miles (using synthetic oil). Every oil change they need to put in 1-2 quarts. Chevy states it is "normal" for their cars to use oil, as much as 1 quart every 2,000 miles (and that's a quote from a Chevy service representative). I have been driving for over 40 years and have never had a car use that much oil."

• <u>www.carcomplaints.com on February 6, 2013 for a 2012 Chevrolet</u> <u>Equinox -</u>"Purchased this vehicle and assured by the dealer that I was getting a great deal. I travel ALOT and use my personal vehicle for it. I was in the habit of checking my oil dipstick level every few fill ups. I took it in to the dealer to have it looked at when I noticed that the oil consumption was about a quart every 1000 miles. I was told then that "Yea, you have to keep an eye on your oil level and check it frequently.

My complaint is that if it is known that the engine consumes a quart of oil every 1000 miles, why is it NOT in the manual? Why did the dealer NOT tell me that this is a known problem when I bought it? Why does the manual tell you to change the oil every 4 - 5 k miles? By the time you go to change the oil you have been out of oil and have damaged the engine. I am a mechanical tech and you can not possibly tell me that this is an expected issue for an engine. Why hasn't Chevy installed an oil level sensor to tell the owner that the oil level is low?

I cant wait to get out of this vehicle and will not buy another Chevy due to the way I have been treated as to this. I have been treated as if it is MY fault. I have 95,000 miles on it. That would be about 70 quarts of oil added to it. It is not the cost as much as it is what damage has been done to this engine from this. The car is in the shop right now for stalling. My regular mechanic says it is the cam position sensor that usually does this when the oil gets sludgy due to being low occasionally."

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matter. I always tell myself to learn from my misfortunes and today I've learned that when I'm thinking about buying another vehicle I will buy used, for sure. If I knew that buying new would provide me with this kind of service and reliability I would have definitely explored more options. I made the mistake of thinking that by buying a new vehicle I would have assurance that I would have a reliable vehicle, and that with maintenance I could hopefully get a good life out of the car, for my family. I was mistaken. ©P.S. If I'm wrong PLEASE educate me cause I have no idea how cars work, I'm basing my feeling purely on business, product and ethics, so I'd love some feedback – bad or good please.

- www.carcomplaints.com on September 1, 2010 for a 2010 Chevrolet • Equinox: "What kind of engine burns a litre (quart) every 1000km (620miles)? A 2.4L 4cyl piece of garbage from GM, that's what kind! Maybe the engine just needs to be broken in. Nope, that's not it. Maybe it needs synthetic. Nope, not that either. The geniuses at my dealership were pretty stumped when I approached them back in 2010 with this problem. They told me I had to do something called an "oil report" to confirm that it was burning oil. Cause that's something that people lie about? Regardless, This process involves me driving out of my way to the dealership everytime I get low on oil - which is about every 2nd tank of gas. What if I'm out of town? "Well...try to get topped up before you go". Right, because I have time for that. Huge inconvenience? Absolutely. Apparently this oil report was a huge inconvenience for them as well. Every time I showed up at the dealership to get oil added, they treated me like a second class citizen. So I gave up on the oil report and resigned myself to adding a litre at every 2nd fill up. Now, 4 years later I read online that some people are getting their engines replaced as a result of excessive oil consumption! Thanks CARCOMPLAINTS.COM! I'll be working on my dealership to replace my engine. Then I will be trading in my Equinox for an import."
- <u>www.carcomplaints.com on June 1, 2010 for a 2010 Chevrolet</u> <u>Equinox:</u> "Bought my 2010 Equinox new. Really like the car, except for the oil consumption problem. Engine used a quart of oil each 1,000 miles. I put up with it for several years. Then, at 50,000 miles, I took it to Bridgewater Chevrolet. Oil consumption test showed excessive oil consumption. Dealer replaced the pistons and rings under warranty. That was 1,000 miles ago. Engine shows no sign of excessive oil consumption now. Should have done this 5 years ago, but I had heard that GM was resistant to making needed repairs when the problem was first being discovered. Now, I assume, with a mountain of evidence and complaints, GM is doing the right thing and repairing engines under warranty. If you own this car and have an oil

problem, don't wait. Take it to the dealer for test and repair. The dealers have a bulletin from GM about the issue, so they are expecting to hear from you."

• <u>www.carcomplaints.com on September 15, 2009 for a 2010 Chevrolet</u> <u>Equinox:</u> "Amazingly, after several trips to Len Stoler for an oil consumption test. they said that it never used more then a quart of oil per thousand. I decided to check their honesty. I drained and oil and made sure it was 1.5 quarts low. Amazingly according to Len Stoler, it didn't use more then a quart. That's when I stopped taking it for the oil consumption test."

162. GM failed to disclose the defect, or conduct sufficient testing of predecessor vehicle models that would have revealed the defect. As a result, GM has caused Plaintiffs and Class Members to expend money at its dealerships or other third-party repair facilities and/or to take other remedial measures related to the Oil Consumption Defect in the Class Vehicles, such as having additional oil containers in the Class Vehicles at all times.

163. Despite its knowledge of the Oil Consumption Defect, GM's policy when owners or lessees of Class Vehicles complain to GM specifically about that defect, is only to tell the customer to bring the vehicle in every 500 miles for an oil check, although GM has and had knowledge that there was excessive oil consumption as a result of utilizing faulty piston rings and related defects.

164. GM has never fully disclosed the Oil Consumption Defect to consumers. Instead GM attempted to squelch public recognition of the Oil Consumption Defect by propagating the falsehood that the excessive oil consumption that drivers of the class vehicles were experiencing was "normal."

165. GM has allowed drivers of the Class vehicles to continue driving those vehicles, despite knowing that they are consuming oil at an abnormally high rate, and has continued allowing drivers of the Class Vehicles to rely on the Oil Life Monitoring System, despite knowledge that

this system does not give notice that the vehicle has less than the amount of oil necessary for proper engine lubrication and proper, safe operation. As a result, Class Vehicles suffer engine failure and engine damage, including spark plug fouling, ring wear, lifter collapse, bent pushrods, camshaft wear, valve wear, rod bearing wear, rod breakage, wristpin wear, wristpin breakage, crankshaft wear and main bearing or destruction and other forms of internal component wear/breakage due to unacceptable heat and friction levels and oil breakdown.

166. GM has not recalled the Class Vehicles to repair the Oil Consumption Defect, and has not offered to reimburse Class Vehicle owners and lessees who incurred costs relating to excessive oil consumption and related problems.

167. Plaintiffs and Class Members are reasonable consumers who do not reasonably expect their Class Vehicles to require the addition of several quarts of oil between regularly scheduled oil changes.

168. Plaintiffs and Class Members reasonably expected that GM would not sell or lease Class Vehicles with known defects, such as the Oil Consumption Defect, and that it would disclose any such defects to its consumers before they purchased or leased Class Vehicles. Plaintiffs and Class Members did not expect GM to conceal the Oil Consumption Defect, or to continually deny its existence.

169. Consequently, Plaintiffs and Class Members have not received the benefit for which they bargained when they purchased or leased the Class Vehicles.

170. As a result of the Oil Consumption Defect, the value of the Class Vehicles has diminished, including without limitation the resale value of the Class Vehicles.

## TOLLING OF THE STATUTE OF LIMITATIONS

#### **Discovery Rule Tolling**

171. Plaintiffs could not have discovered through the exercise of reasonable diligence that their Class Vehicles were defective within the time period of any applicable statutes of limitation.

172. Among other things, neither Plaintiffs nor the other Class members knew or could have known that the Class Vehicles are equipped with 2.4L Engines with the Oil Consumption Defect, which causes those engines to consume oil at an abnormally high rate and to sustain engine damage resulting therefrom.

173. Further, Plaintiffs had no knowledge of the defect and it occurred in a part of the engine that was not visible to consumers. GM attempted to squelch public recognition of the Oil Consumption Defect by propagating the falsehood that the excessive oil consumption that drivers of the class vehicles were experiencing was "normal." Accordingly, any applicable statute of limitation is tolled.

#### A. Fraudulent Concealment Tolling

174. Throughout the time period relevant to this action, GM concealed from and failed to disclose to Plaintiffs and the other Class members vital information about the Oil Consumption Defect described herein.

175. In the owner's letters sent by GM to its customers beginning in August 2014 associated with the MY 2010-2012 SCA's, GM instructed its customers:

[I]f this [excessive oil consumption] condition is present, the oil can light may illuminate on your instrument panel or you may have one of the following messages in the Driver Information Center: "Engine Oi Low - Add Oil" or "Oil Pressure Low - Slop Engine."...

Do not take your vehicle to your GM dealer as a result of this letter unless you believe that your vehicle has the condition as described above.

(Emphasis added).

176. Because the OPW systems did not work reliably (or at all) on the Class Vehicles, and GM knew or was reckless in not knowing that this was the case, its instruction to customers to not take their vehicles to the dealer for inspection if the OLM warnings did not appear is tantamount to a deliberate concealment of the defect from Class Vehicle owners.

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177. GM kept Plaintiffs and the other Class members ignorant of vital information essential to the pursuit of their claims. As a result, neither Plaintiffs nor the other Class members could have discovered the defect, even upon reasonable exercise of diligence.

178. Throughout the Class Period, GM has been aware that the 2.4L engines it designed, manufactured, and installed in the Class Vehicles contained the Oil Consumption Defect, resulting in excessive oil loss and engine damage.

179. Despite its knowledge of the defect, GM failed to disclose and concealed, and continues to conceal, this critical information from Plaintiffs and the other Class members, even though, at any point in time, it could have done so through individual correspondence, media release, or by other means.

180. Plaintiffs and the other Class members justifiably relied on GM to disclose the Oil Consumption Defect in the Class Vehicles that they purchased or leased, because that defect was hidden and not discoverable through reasonable efforts by Plaintiffs and the other Class members.

181. Thus, the running of all applicable statutes of limitation have been suspended with respect to any claims that Plaintiffs and the other Class members have sustained as a result of the defect, by virtue of the fraudulent concealment doctrine.

#### **B.** Estoppel

182. GM was under a continuous duty to disclose to Plaintiffs and the other Class members the true character, quality, and nature of the defective 2.4L engines.

183. GM knowingly concealed the true nature, quality, and character of the defective2.4L engines from consumers.

184. Based on the foregoing, GM is estopped from relying on any statutes of limitations in defense of this action.

#### **CLASS ACTION ALLEGATIONS**

185. Plaintiffs bring this lawsuit individually and as a class action on behalf all others similarly situated pursuant to Federal Rules of Civil Procedure ("Rule") 23(a), (b)(2), and/or

(b)(3). This action satisfies the numerosity, commonality, typicality, adequacy, predominance, and superiority requirements of Rule 23.

186. The Class and Subclass are defined as:

All current and former owners or lessees of 2010 through 2017 model year Chevrolet Equinox equipped with a 2.4 liter engine ("the Nationwide Class").

All current and former owners or lessees of 2010 through 2017 model year Chevrolet Equinox who reside in the state of Florida and who purchased or leased their vehicles in the State of Florida ("the Florida Subclass").

The Nationwide Class and the Florida Subclass, collectively, are referred to as the "Class," herein.

187. Excluded from the Class are: (1) GM, any entity or division in which GM has a controlling interest, and its legal representatives, officers, directors, assigns, and successors; (2) the Judge to whom this case is assigned and the Judge's staff; and (3) those persons who have suffered personal injuries as a result of the facts alleged herein. Plaintiffs reserve the right to amend the Class definition if discovery and further investigation reveal that the Class should be expanded or otherwise modified.

188. <u>Numerosity</u>: Although the exact number of Class Members is uncertain and can only be ascertained through appropriate discovery, the number is great enough such that joinder is impracticable. The disposition of the claims of these Class Members in a single action will provide substantial benefits to all parties and to the Court. The Class Members are readily identifiable from information and records in GM's possession, custody, or control, as well as from records kept by the Department of Motor Vehicles of various states.

189. <u>Typicality</u>: The claims of the representative Plaintiffs are typical in that Plaintiffs, like all Class Members, purchased and/or leased a Class Vehicle designed, manufactured, and distributed by GM with the Oil Consumption Defect. Plaintiff, like all Class Members, has been damaged by GM's misconduct in that, *inter alia*, they have incurred or will continue to incur the cost of purchasing motor oil to replace the oil consumed by his defective engine. Furthermore, the

factual bases of GM's misconduct are common to all Class Members and represent a common thread of fraudulent, deliberate, and negligent misconduct resulting in injury to all Class Members.

190. <u>Commonality</u>: There are numerous questions of law and fact common to Plaintiffs and Class Members that predominate over any individual questions. These common legal and factual issues include the following:

- whether the Class Vehicles and their engines are defectively designed or manufactured such that they are not suitable for their intended use;
- whether the fact that the Class Vehicles suffer from the Oil Consumption Defect would be considered material to a reasonable consumer;
- whether, as a result of GM's concealment or failure to disclose material facts, Plaintiff and Class Members acted to their detriment by purchasing Class Vehicles manufactured by GM;
- whether GM was aware of the Oil Consumption Defect;
- whether the Oil Consumption Defect constitutes an unreasonable safety risk;
- whether GM breached express warranties with respect to the Class Vehicles;
- whether GM has a duty to disclose the defective nature of the Class Vehicles and the Oil Consumption Defect to Plaintiffs and Class Members;
- whether Plaintiffs and Class Members are entitled to equitable relief, including but not limited to a preliminary and/or permanent injunction; and
- whether GM violated the consumer protection statute of Florida when it sold to consumer Class Vehicles that suffered from the Oil Consumption Defect.

191. <u>Adequate Representation</u>: Plaintiffs will fairly and adequately protect the interests of Class Members. Plaintiffs have retained attorneys experienced in the prosecution of class actions, including consumer and product defect class actions, and Plaintiffs intend to prosecute this action vigorously.

192. <u>Predominance and Superiority</u>: Plaintiffs and Class Members have all suffered and will continue to suffer harm and damages as a result of GM's unlawful and wrongful conduct. A class action is superior to other available methods for the fair and efficient adjudication of the controversy. Absent a class action, Class Members would likely find the cost of litigating their claims prohibitively high and would therefore have no effective remedy at law. Because of the relatively small size of Class Members' individual claims, it is likely that few Class Members could afford to seek legal redress for GM's misconduct. Absent a class action, Class treatment of common questions of law and fact would also be a superior method to multiple individual actions or piecemeal litigation in that class treatment will conserve the resources of the courts and the litigants and will promote consistency and efficiency of adjudication.

### FIRST CAUSE OF ACTION

# Breach of Written Warranties under the Magnuson-Moss Warranty Act, 15 U.S.C. § 2301, *et seq*. (On behalf of the Nationwide Class and Florida Subclass)

193. Plaintiffs incorporate by reference the allegations contained in paragraphs 1-194 of this Complaint as though fully set forth herein.

194. Plaintiffs bring this cause of action individually and on behalf of the Nationwide Class and Florida Subclass against GM.

195. Plaintiffs and Class Members are "consumers" within the meaning of the Magnuson-Moss Warranty Act ("MMWA"), 15 U.S.C. § 2301(3).

196. GM is a "supplier" and "warrantor" within the meaning of 15 U.S.C. § 2301(4)-(5).

197. The Class Vehicles are "consumer products" within the meaning of 15 U.S.C. §

2301(1).

198. GM's express warranties are each a "written warranty" within the meaning of 15 U.S.C. § 2301(6).

199. GM extended a 3-year/36,000 mile New Vehicle Limited Warranty with the purchase or lease of the Class Vehicles, thereby warranting to repair or replace any part defective in material or workmanship at no cost to the owner or lessee. GM also extended a Powertrain Limited Warranty that covers the cost of all parts and labor necessary to repair powertrain components, including the engine, that are defective in workmanship and materials within five years or 100,000 miles, whichever occurs first, calculated from the start date of the Basic Limited Warranty with purchase of a Class Vehicle. The Limited Warranty Begins on the date in which the purchaser first put the vehicle into service. The Limited Warranty transfers automatically with the transfer of vehicle ownership during the warranty period. GM further extended a 7.5-year/120,000 mile Extended Warranty to Plaintiffs by letter.

200. After the sale of the Class Vehicles, GM offered a 7.5-year/120,000 mile Extended Warranty for the "excessive engine oil consumption" defect to Plaintiffs and the Class by letter for certain repairs, and a 10 year/120,000 mile Extended Warranty for other repairs, called the Special Coverage Adjustments ("SCAs"). (*See, e.g.*, **Exhibits 1 and 6**.)

201. GM breached each of these express warranties by:

- Selling and leasing Class Vehicles with engines that were defective in material and workmanship, requiring repair or replacement within the warranty period; and
- Refusing and/or failing to honor the express warranties by repairing or replacing, free of charge, any defective component parts.

202. GM's breach of express warranty has deprived Plaintiffs and Class members of the benefit of their bargain.

203. The amount in controversy of the Plaintiffs' individual claims meet or exceed the sum or value of \$50,000.00, and there are over 100 class members.

204. GM has been afforded a reasonable opportunity to cure its breach of written warranties, including, when Plaintiffs and Class Members brought their vehicles in for diagnosis and repair of their engines.

205. As a direct and proximate cause of GM's breach of written warranties, Plaintiffs and Class members sustained damages and other losses in an amount to be determined at trial. GM's conduct damaged Plaintiffs and Class Members, who are entitled to recover actual damages, consequential damages, specific performance, diminution in value, costs, including statutory attorneys' fees and/or other relief as appropriate.

# SECOND CAUSE OF ACTION Breach of Implied Warranty (On behalf of the Nationwide Class and Florida Subclass)

206. Plaintiffs incorporate by reference the allegations contained in paragraphs 1-194 of this Complaint as though fully set forth herein.

207. Plaintiffs bring this cause of action individually and on behalf of the Nationwide Class and Florida Subclass against GM.

208. GM was at all relevant times the manufacturer, distributor, warrantor, and/or seller of the Class Vehicles. GM knew or had reason to know of the specific use for which the Class Vehicles were purchased.

209. GM provided Plaintiffs and Class Members with implied warranties that the Class Vehicles were merchantable and fit for the ordinary purposes for which they were sold.

210. However, the Class Vehicles are not fit for their ordinary purpose of providing reasonably reliable and safe transportation because, *inter alia*, the Class Vehicles and their engines contained the Oil Consumption Defect. Therefore, the Class Vehicles are not fit for their particular purpose of providing safe and reliable transportation.

211. The problems associated with the Oil Consumption Defect, such as engine stalls, the engine running hot, spark plug fouling, engine misfires, unexpected loss of power, the vehicle jerking and other problems as discussed herein pose enough of a safety risk such that the vehicles do not provide safe reliable transportation, and thus breach of the implied warranty of merchantability. These problems are exacerbated by the frequent failure of the oil pressure

indicator to properly function and alert or warn plaintiffs of the dangerously low levels of oil in the engine, which constitutes a further breach of the implied warranty.

212. GM impliedly warranted that the Class Vehicles were of merchantable quality and fit for such use. These implied warranties included, among other things: (i) a warranty that the Class Vehicles and their engines were manufactured, supplied, distributed, and/or sold by GM were safe and reliable for providing transportation and would not consume an abnormally high amount of oil between scheduled oil changes; and (ii) a warranty that the Class Vehicles and their engines would be fit for their intended use while the Class Vehicles were being operated.

213. Contrary to the applicable implied warranties, the Class Vehicles and their engines, at the time of sale and thereafter, were not fit for their ordinary and intended purpose of providing Plaintiffs and Class Members with reliable, durable, and safe transportation. Instead, the Class Vehicles are defective, including but not limited to the defective design and/or manufacture of their engines that suffer from the Oil Consumption Defect alleged herein.

214. GM's actions, as complained of herein, breached the implied warranties that the Class Vehicles were of merchantable quality and fit for such use in violation of said warranty.

## THIRD CAUSE OF ACTION

# **Common Law Breach of Contract/Express Warranties** (On behalf of the Nationwide Class and Florida Subclass)

215. Plaintiffs incorporate by reference the allegations contained in paragraphs 1-194 of this Complaint as though fully set forth herein.

216. In the course of selling the Class Vehicles, GM expressly warranted in writing that the vehicles were covered by certain warranties, including the Class Vehicles' Limited Warranties and GM's express warranty such as that it provided to Plaintiffs.

217. Further, as evidenced by the 2013 September TSB (**Exhibit 4**) and the 2012 Techlink article (**Exhibit 2**), the Oil Consumption Defect is covered by the New Vehicle Limited Warranty.

218. GM breached its express warranties to repair defects in materials and workmanship of any part supplied by GM. GM has not repaired, and has been unwilling to reasonably repair, the Oil Consumption Defect.

219. Furthermore, the express warranties to repair defective parts, fail in their essential purpose because the contractual remedy is insufficient to make Plaintiffs and Class Members whole and because GM has failed and/or has refused to adequately provide the promised remedies within a reasonable time.

220. Accordingly, recovery by Plaintiffs is not limited to the express warranties of repair to parts defective in materials or workmanship, and Plaintiffs seek all remedies as allowed by law.

221. Also, as alleged in more detail herein, at the time that GM warranted and sold the Class Vehicles it knew that the Class Vehicles did not conform to the warranties and were inherently defective, and GM wrongfully and fraudulently misrepresented and/or concealed material facts regarding the vehicles. Plaintiffs and Class Members were therefore induced to purchase the Class Vehicles under false and/or fraudulent pretenses. The enforcement under these circumstances of any limitations whatsoever precluding the recovery of incidental and/or consequential damages is unenforceable.

222. Moreover, many of the damages flowing from the Class Vehicles cannot be resolved through GM's limited remedy of "replacement or adjustments," (*see* SCAs, **Exhibits 1** and **6**) as incidental and consequential damages have already been suffered due to GM's fraudulent conduct as alleged herein, and due to their failure and/or continued failure to provide such limited remedy within a reasonable time, and any limitation on Plaintiffs' remedies would be insufficient to make Plaintiffs whole.

223. GM was provided notice of these issues by numerous complaints, including Plaintiffs' pre-suit correspondence and numerous other customer complaints regarding the Oil Consumption Defect before or within a reasonable amount of time after the allegations of the defect became public.

224. As a direct and proximate result of GM's breach of express warranties, Plaintiffs and Class Members have been damaged in an amount to be determined at trial.

225. As a direct and proximate result of GM's breach of express warranties, Plaintiffs and Class Members did not receive the benefit of their bargain and suffered damages at the point the point of sale stemming from their overpayment for a Class Vehicle with a latent safety defect.

# <u>FOURTH CAUSE OF ACTION</u> Violation of Florida's Unfair & Deceptive Trade Practices Act, Fla. Stat. § 501.201, *et seq*. (On behalf of the Florida Subclass)

226. Plaintiffs incorporate by reference the allegations contained in paragraphs 1-194 of this Complaint as though fully set forth herein.

227. Plaintiffs bring this action on behalf of themselves and the Florida Subclass against all Defendants.

228. Plaintiffs and the Class members are "consumers" within the meaning of Fla. Stat.§ 501.203(7).

229. GM engaged in "trade" or "commerce" within the meaning of Fla. Stat. § 501.203(8).

230. The Florida Unfair and Deceptive Trade Practices Act ("FUDTPA") makes unlawful "[u]nfair methods of competition, unconscionable acts or practices, and unfair or deceptive acts or practices in the conduct of any trade or commerce . . ." Fla. Stat. § 501.204(1). In the course of their business, GM, through their agents, employees, and/or subsidiaries, violated the FUDTPA as detailed above. Specifically, in manufacturing, selling, and designing the Class Vehicles, and in marketing, offering for sale, and selling the defective Class Vehicles, Defendants engaged in unfair or deceptive acts or practices prohibited by Fla. Stat. § 501.204(1), including, but not limited to:

a. causing likelihood of confusion or of misunderstanding as to the approval or certification of the Class Vehicles;

- b. representing that the Class Vehicles have approval, characteristics, uses, or benefits that they do not have;
- c. representing that the Class Vehicles are of a particular standard, quality, and grade when they are not;
- d. advertising the Class Vehicles with the intent not to sell or lease them as advertised;
- e. engaging in other conduct which created a likelihood of confusion or of misunderstanding; and
- f. using or employing deception, fraud, false pretense, false promise or misrepresentation, or the concealment, suppression or omission of a material fact with intent that others rely upon such concealment, suppression or omission, in connection with the advertisement and sale or lease of the Class Vehicles, whether or not any person has in fact been misled, deceived or damaged thereby.

231. GM's scheme and concealment of the true characteristics of the Oil Consumption Defect were material to Plaintiffs and the Class, as GM intended. Had they known the truth, Plaintiffs and the Class would not have purchased or leased the Class Vehicles, or—if the Class Vehicles' true nature had been disclosed and mitigated, and the Vehicles rendered legal to sell would have paid significantly less for them.

232. Plaintiffs and Class members had no way of discerning that GM's representations were false and misleading, or otherwise learning the facts that GM had concealed or failed to disclose, because GM had exclusive knowledge of the information surrounding the Oil Consumption Defect and did not alert Plaintiffs and Class Members to said information prior to their purchase of their Class Vehicles. Plaintiff and Class members did not, and could not, unravel GM's deception on their own.

233. GM had an ongoing duty to Plaintiffs and the Class to refrain from unfair and deceptive practices under the FUDTPA in the course of their business. Specifically, GM owed Plaintiffs and the Class Members a duty to disclose all the material facts concerning the Oil

Consumption Defect because they possessed exclusive knowledge, they intentionally concealed it from Plaintiffs and the Class Members, and/or they made misrepresentations that were rendered misleading because they were contradicted by withheld facts.

234. Plaintiffs and Class members suffered ascertainable loss and actual damages as a direct and proximate result of GM's concealment, misrepresentations, and/or failure to disclose material information.

235. GM's violations present a continuing risk to Plaintiffs and the Class, as well as to the general public. GM's unlawful acts and practices complained of herein affect the public interest.

236. Pursuant to Fla. Stat. §§ 501.2105(1)-(2), Plaintiffs and the Class Members seek an order enjoining Defendants' unfair and/or deceptive acts or practices, and awarding damages and any other just and proper relief available under the FUDTPA.

#### **RELIEF REQUESTED**

Plaintiffs, individually and on behalf of all others similarly situated, respectfully request that the Court enter judgment against GM, and accordingly request the following:

- An order certifying the proposed Class and Subclass and designating Plaintiffs as named representatives of the Class and Subclass and designating the undersigned as Class Counsel;
- A declaration that GM is financially responsible for notifying all Class Members about the defective nature of the Class Vehicles and their engines;
- An order enjoining GM from further deceptive distribution, sales, and lease practices with respect to their Class Vehicles; to remove and replace Plaintiff and Class Members' engines with a suitable alternative product free of defect; and repair all other damages to the Class Vehicles caused by the defective engines;

- A further order enjoining GM from the conduct alleged herein, including an order enjoining GM from concealing the existence of the Oil Consumption Defect during distribution, sales, and advertisements, as well as during customer and warranty service visits for the Class Vehicles;
- An award to Plaintiffs and Class Members of compensatory, actual, exemplary, and statutory damages, including interest, in an amount to be proven at trial;
- A declaration that GM must disgorge, for the benefit of Plaintiffs and Class Members, all or part of the ill-gotten profits it received from the sale or lease of their Class Vehicles, or make full restitution to Plaintiffs and Class Members;
- A recall of all Class Vehicles;
- An award of attorneys' fees and costs pursuant to applicable law;
- An award of pre-judgment and post-judgment interest, as provided by law;
- Any and all remedies provided pursuant to Florida's Unfair and Deceptive Trade Practices Act;
- Leave to amend the Complaint to conform to the evidence produced at trial;
- Such other relief as may be appropriate under the circumstances.

#### **DEMAND FOR JURY TRIAL**

Plaintiffs, on behalf of themselves and all others similarly situated, hereby demand a trial by jury as to all matters so triable.

Dated: September 10, 2018.

#### GREG COLEMAN LAW PC

<u>s/Rachel Soffin</u> Rachel Soffin, FL Bar No. 0018054 Gregory F. Coleman\* Adam A. Edwards\* Mark E. Silvey\* GREG COLEMAN LAW PC First Tennessee Plaza 800 S. Gay Street, Suite 1100

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\*Pro hac vice forthcoming

Attorneys for Plaintiffs and the Putative Class

#### JS 44 (Rev. 0 Gases 2 ki & do 10/10/2018 Page 1 of 1

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. *(SEE INSTRUCTIONS ON NEXT PAGE OF THIS FORM.)* NOTICE: Attorneys MUST Indicate All Re-filed Cases Below.

#### I. (a) PLAINTIFFS ELLEN BERMAN and DAYANA GUACH, ON BEHALF OF THEMSELVES AND ALL OTHERS SIMILARLY SITUATED

(b) County of Residence of First Listed Plaintiff St. Lucie County, FL (EXCEPT IN U.S. PLAINTIFF CASES)

(c) Attorneys (Firm Name, Address, and Telephone Number) Rachel Soffin, GREG COLEMAN LAW PC, 800 S. Gay Street, Suite 1100, Knoxville, TN 37929; Tel: 865-247-0080 DEFENDANTS GENERAL MOTORS LLC, A Delaware limited liability company

County of Residence	of First Listed Defendant
	(IN U.S. PLAINTIFF CASES ONLY)
NOTE:	IN LAND CONDEMNATION CASES, USE THE LOCATION OF THE TRACT OF LAND INVOLVED.
Attorneys (If Known)	

(d) Check County Where Action Arose: 🗆 miami- dade 🗆 monroe 🗖 broward 🗆 palm beach 🗖 martin 🗖 st. lucie 🗖 indian river 🗖 okeechobee 🗖 highlands

II. BASIS OF JURISDI	CTION (Place an "X" i	n One Box Only)	I. CITIZENSHIP OF	PRI	NCIPA	L PARTIES (1	Place an "X" in C	one Box fo	or Plaintiff)
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1 U.S. Government Plaintiff	3 Feder (U.S. Government)	eral Question Not a Party)	Citizen of This State	<b>PTF</b> <b>₽</b> 1	<b>DEF</b>	Incorporated or Print of Business In This	•	PIF 4	<b>DEF</b> □4
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□ 110 Insurance         □ 120 Marine         □ 130 Miller Act         □ 140 Negotiable Instrument         □ 150 Recovery of Overpayment         & Enforcement of Judgment         □ 151 Medicare Act         □ 152 Recovery of Defaulted         Student Loans         (Excl. Veterans)         □ 153 Recovery of Overpayment         of Veteran's Benefits         □ 160 Stockholders' Suits         □ 190 Other Contract         □ 195 Contract Product Liability         □ 196 Franchise <b>REAL PROPERTY</b> □ 210 Land Condemnation         □ 220 Foreclosure         □ 230 Rent Lease & Ejectment         □ 245 Tort Product Liability         □ 290 All Other Real Property	PERSONAL INJURY	<ul> <li>☐ 370 Other Fraud</li> <li>☐ 371 Truth in Lending</li> <li>☐ 380 Other Personal Property Damage</li> <li>☎ 385 Property Damage Product Liability</li> <li>PRISONER PETITIONS</li> <li>Habeas Corpus:</li> <li>☐ 463 Alien Detainee</li> <li>☐ 510 Motions to Vacate Sentence</li> <li>Other:</li> <li>☐ 530 General</li> <li>☐ 535 Death Penalty</li> </ul>	IMMIGRATION	s	423 Withd 28 Ui PROPE   820 Copy   830 Paten 835 Paten 835 Paten New Drug   840 Trade <b>SOCIA</b>   861 HIA (   862 Black   862 Black   864 SSID   865 RSI (   FEDERA   870 Taxes or De	SC 157 <b>RTY RIGHTS</b> rights t t - Abbreviated g Application mark <b>L SECURITY</b> (1395ff) Lung (923) C/DIWW (405(g)) Title XVI	□       375 False O         □       376 Qui Ta         □       3729 (a))         □       400 State R         □       410 Antitru         □       430 Banks:         □       450 Commu         □       460 Deport         □       480 Consur         □       480 Consur         □       490 Cable/3         □       890 Other S         □       891 Agricu         □       893 Enviroo         □       896 Arbitra         □       899 Admin         Act/Review       Agency De         □       950 Consti         Statutes       1	m (31 US eapportic st and Bank erce ation eer Influe ganization ner Credi Sat TV ies/Comr Statutory ltural Act nmental N m of Info tion istrative F v or Appe cision	GC onment ing enced and as t modities/ Actions s Matters rmation Procedure al of
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VII. CAUSE OF ACTION	Cite the U.S. Civil Sta 28 U.S.C. Sect to alleged motor LENGTH OF TRIAL	atute under which you are f ion 1332(d), Breach vehicle oil consumpt via days estimated (	iling and Write a Brief Stater of warranties and de ion defect (for both sides to try entire ca	ment o ecep ase)	of Cause ( tive bus	Do not cite jurisdict Siness practic	tional statutes un ces related	less diver to alle	∙sity): ⊎ged
VIII. REQUESTED IN COMPLAINT:	CHECK IF THIS UNDER F.R.C.P.	IS A CLASS ACTION . 23	DEMAND \$		C	HECK YES only i	if demanded in	complai	int:
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ABOVE INFORMATION IS	TRUE & CORRECT TO		WLEDGE ATTORNEY OF RECORD						
DATE September 10, 2018		s/Rachel Soff							
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Case 2:18-cv-14371-RLR Document 1-2 Entered on FLSD Docket 09/10/2018 Page 1 of 2

AO 440 (Rev. 06/12) Summons in a Civil Action

UNITED STATES DISTRICT COURT for the Southern District of Florida		
ELLEN BERMAN and DAYNA GUACH on behalf of themselves and all others similarly situated,	) ) )	
Plaintiff(s) v. GENERAL MOTORS LLC, a Delaware limited liability company	) ) Civil Action No. ) )	
Defendant(s)	) ) N A CIVIL ACTION	

To: (Defendant's name and address) GENERAL MOTORS LLC By and through its Registered Agent, CORPORATION SERVICE COMPANY 1201 Hays Street Tallahassee, FL 32301-2525

A lawsuit has been filed against you.

Within 21 days after service of this summons on you (not counting the day you received it) — or 60 days if you are the United States or a United States agency, or an officer or employee of the United States described in Fed. R. Civ. P. 12 (a)(2) or (3) — you must serve on the plaintiff an answer to the attached complaint or a motion under Rule 12 of the Federal Rules of Civil Procedure. The answer or motion must be served on the plaintiff or plaintiff's attorney, whose name and address are:

Rachel Soffin GREG COLEMAN LAW PC 800 S. Gay Street, Suite 1100 Knoxville, TN 37929 Tel: 865-247-0080 Email: rachel@gregcolemanlaw.com

If you fail to respond, judgment by default will be entered against you for the relief demanded in the complaint. You also must file your answer or motion with the court.

CLERK OF COURT

Date:

Signature of Clerk or Deputy Clerk

#### Case 2:18-cv-14371-RLR Document 1-2 Entered on FLSD Docket 09/10/2018 Page 2 of 2

AO 440 (Rev. 06/12) Summons in a Civil Action (Page 2)

Civil Action No.

#### **PROOF OF SERVICE**

(This section should not be filed with the court unless required by Fed. R. Civ. P. 4 (l))

	This summons for (nam	ne of individual and title, if any)			
was re	ceived by me on (date)	·			
	□ I personally served	the summons on the individua	al at (place)		
			on (date)	; or	
	$\Box$ I left the summons	at the individual's residence of	or usual place of abode with (name)		
		, a per	son of suitable age and discretion who res	sides there,	
			to the individual's last known address; or		
	$\Box$ I served the summo	ons on (name of individual)		, whe	o is
	designated by law to a	accept service of process on b			
			on (date)	; or	
	$\Box$ I returned the summ	nons unexecuted because		;	, or
	Other ( <i>specify</i> ):				
	My fees are \$	for travel and \$	for services, for a total of \$	0.00	
	I declare under penalty	of perjury that this informati	on is true.		
Date:					
Duter			Server's signature		
			Printed name and title		

Server's address

Additional information regarding attempted service, etc:

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# **EXHIBIT 1**

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March 2015

This notice applies to your vehicle, VIN:

Dear General Motors Customer:

As the owner of a 2010-2013 Buick LaCrosse; 2011-2013 Buick Regal; 2012-2013 Buick Verano; 2011-2013 Chevrolet Captiva; 2010-2014 Chevrolet Equinox; 2013 Chevrolet Mailbu; 2012-2013 Chevrolet Orlando; or 2010-2013 GMC Terrain equipped with a 2.4L Ecotec Engine, your satisfaction with our product is very important to us.

This letter is intended to make you aware that some 2010-2013 Buick LaCrosse; 2011-2013 Buick Regal; 2012-2013 Buick Verano; 2011-2013 Chevrolet Captiva; 2010-2014 Chevrolet Equinox; 2013 Chevrolet Mailbu; 2012-2013 Chevrolet Orlando; or 2010-2013 GMC Terrain vehicles equipped with a 2.4L engine that may have experienced high oil consumption may also experience a frozen and/or plugged PCV (positive crankcase ventilation) system during cold weather operation. This condition may increase crankcase pressure leading to a rear crankshaft seal oil leak. If the oil leak is ignored or not noticed, an engine clatter noise may be noticeable and/or the engine pressure warning light may illuminate. If this condition is not corrected, continued driving with engine noise and/or the engine oil pressure light illuminated may damage the engine.

# Do not take your vehicle to your GM dealer as a result of this letter unless you believe that your vehicle has the condition as described above.

**What We Have Done:** General Motors is providing owners with additional protection for the condition described above. If this condition occurs on your vehicle within 10 years of the date your vehicle was originally placed in service or 120,000 miles (193,000 km), whichever occurs first, the condition will be repaired for you at **no charge**. Diagnosis or repair for conditions other than the condition described above is not covered under this special coverage program.

What You Should Do: If you believe that your vehicle has the condition described above, repairs and adjustments qualifying under this special coverage must be performed by a General Motors dealer. You may want to contact your GM dealer to find out how long they will need to have your vehicle so that you may schedule the appointment at a time that is convenient for you. This will also allow your dealer to order parts if they are not already in stock. Keep this letter with your other important glove box literature for future reference.

**Reimbursement:** If you have paid for repairs for the condition described in this letter, please complete the enclosed reimbursement form and present it to your dealer with all required documents. Working with your dealer will expedite your request, however, if this is not convenient, you may mail the completed reimbursement form and all required documents to Reimbursement Department, PO Box 33170, Detroit, MI 48232-5170. The completed form and required documents must be presented to your dealer or received by the Reimbursement Department by March 31, 2016, unless state law specifies a longer reimbursement period.

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March 2015

Bulletin No.: 14882

If you have any questions or need any assistance, just contact your dealer or the appropriate Customer Assistance Center at the number listed below.

Division	Number	Text Telephones (TTY)
Buick	1-800-521-7300	1-800-832-8425
Chevrolet	1-800-222-1020	1-800-833-2438
GMC	1-800-462-8782	1-888-889-2438
Guam	65-6267-1752	
Puerto Rico – English	1-800-496-9992	
Puerto Rico – Español	1-800-496-9993	
Virgin Islands	1-800-496-9994	

We are sorry for any inconvenience you may experience; however, we have taken this action in the interest of your continued satisfaction with our products.

Alicia S. Boler-Davis Sr. Vice President Global Connected Customer Experience

Enclosure GM Program Number 14882 Case 2:18-cv-14371-RLR Document 1-4 Entered on FLSD Docket 09/10/2018 Page 1 of 10

# **EXHIBIT 2**



# New Liquefied Petroleum Gas Chevrolet and GMC Cutaway Vans



The 2012 Chevrolet Express and GMC Savana 3500 and 4500 Cutaway Vans can now be equipped to operate on Liquefied Petroleum Gas (LPG). They include RPO K07 (Vehicle Fuel – Liquefied Petroleum Gas, Liquid) and RPO UFM( Parts Package – Complete Vehicle Kit, 3-Tank) or RPO UFP (Parts Package – Complete Vehicle Kit, 4-Tank).

#### **Vortec V8 Engine**

The Vortec 6.0L V8 engine (RPO LC8) produces 332 horsepower and 370 lb.-ft. of torque. It has hardened intake and exhaust valves and exhaust valve seats for LPG fuel, providing the same durability as a gasoline engine.

Before the engine will start, vaporized LPG fuel in the fuel lines and injectors must be replaced with liquid fuel. A priming process is activated each time the ignition key is turned to ON. This can take eight or more seconds, depending on how long since the engine was last run. The LPG control module illuminates the Wait to Start indicator lamp on the center of the instrument panel during the purge cycle.

**TIP:** On the 3-tank system, if the LPG control module detects a fault within the input or control circuits of the system, the Wait to Start indicator lamp will be commanded to flash the appropriate code.

#### **Liquefied Petroleum Gas**

LPG, the same gas that is delivered to homes for domestic utility use, is mainly propane — a highly flammable, colorless gas. An odor additive enables detection by smell. Propane should never be smelled and a hissing sound should not be heard, except during refueling.

The fuel gauge has been calibrated to LPG pressure and will display full at approximately 36 gallons (136 L) for the 3-tank system and 58 gallons (220 L) for the 4-tank system. LPG quantity is affected by changes in fuel temperature and fuel pressure.



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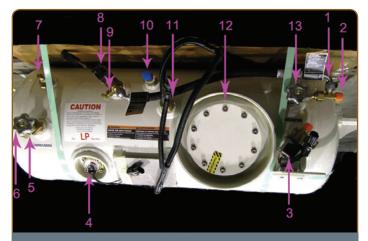
New Cutaway Vans - continued from page 1

It is normal to hear the fuel flowing while the engine is running with the ears close to the pipes and other components. Do not confuse this with a hissing sound at fittings that may indicate a fuel leak.

**TIP:** The black diamond-shaped LPG label on the rear of the vehicle is necessary for compliance with regulations. DO NOT remove this label.

	3-Tank System	4-Tank System
Fuel tank locations	Tanks 1, 2 and 3, 13 x 34 inch each, behind rear axle	Tanks 1, 2 and 3, 13 x 34 inch each, behind rear axle. Tank 4, 11 x 77 inch, mid-ship
System capacity	36 gallons	58 gallons

The LPG system, including the tanks and tubing, has been designed to hold gas at a working pressure of 312.5 psi (2,154.6 kPa) and a burst pressure of 1,250 psi (8,618 kPa). It has also been tested for safety. Baffles are built into the tanks to keep the fuel pump submerged in liquid propane at all times.



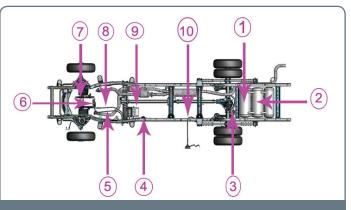
LPG Tank Components (front tank of 3-tank system shown)

- LPG fuel bypass loop, mounted to a T-fitting on the return port of the fuel tank
- 2. Connection for the fuel return line from the distribution block
- 3. LPG cut-off solenoid, mounted to the outlet port of the fuel tank
- 4. Fuel level sensor
- 5. Liquid propane service valve and port
- 6. Manual shut-off for the liquid propane service valve (handle not included)
- 7. Spitter valve. Used for visual verification of 80% fill
- 8. LPG bypass loop solenoid and valve
- 9. Manual shut-off valve for LPG bypass loop
- 10. Fuel tank fill port and behind it, inside the tank is the 80% stop fill valve
- 11. Fuel tank electrical wiring harness pass-through for the internal fuel pump
- 12. Fuel tank access cover plate, for the internal components
- 13. Manual shut-off valve for the fuel return line

#### **System Components**

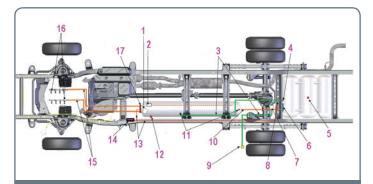
**Fuel Tank Shields** – The tank shields protect the LPG tanks. If a tank shield is removed for any reason, always reinstall it before operating the vehicle.

**Overfilling Prevention Device** – This device is a floatactuated valve that prevents the tank from being filled more than



**3-Tank LPG Component Location** 

- 1. Internal electric fuel pump
- 2. Pressure Relief Valve (PRV)
- 3. Fuel fill filter
- 4. Fuel supply filter
- 5. Fuel return line
- 6. Fuel distribution block
- 7. Fuel injector rail, passenger side of engine
- 8. Fuel supply line
- 9. Evaporative emission (EVAP) system
- 10. LPG fill cup



#### 4-Tank LPG Component Location

- 1. Primary fuel pump (internal)
- 2. Scavenge fuel pump (internal)
- 3. Fuel fill lines
- 4. Rear fuel tank fill port and 80% stop fill valve
- 5. Pressure Relief Valve (PRV)
- 6. Fuel transfer pump or secondary transfer Liquid Propane Delivery Module (LPDM)
- 7. Fuel fill filter
- 8. Fuel fill line T-fitting
- 9. LPG fill cup, Sherwood Double Back Check Fill Valve, and fuel fill line
- 10. Transfer fuel line and port
- 11. Main fuel tank (mid-ship tank) fill port and transfer fuel line fill port
- 12. Pressure Relief Valve (PRV)
- 13. Electrical wiring harness
- 14. Liquid Propane Control Module (LPCM).
- 15. Fuel lines (concentric design)
- 16. Fuel rails and injectors
- 17. Liquid Propane Delivery Module (LPDM)

continued on page 3

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# New Cutaway Vans -

continued from page 2

80%, to allow room for expansion. A properly functioning OPD valve stops gas flow immediately when the mechanism closes.

**Overflow Valves** – Every inlet and outlet valve on the propane tanks has a built-in overflow valve. If propane tries to exit the system at a higher rate than a calibrated amount, the difference in pressure closes the overflow valve and restricts the flow with a 0.080 in. (2 mm) diameter orifice. Once the difference in pressure is equalized, the overflow valve will open.

**Pressure Relief Valve** – If the pressure in the fuel tank exceeds 312.5 psi (2,154.6 kPa), the valve vents propane vapor to the atmosphere. The pressure will not get this high unless the tank has been overfilled or unless the tank is hotter than  $140^{\circ}F$  ( $60^{\circ}C$ ).

**Fuel Fill Filter** – The fuel fill filter is located on the frame rail between the front of the fuel tank and the fill valve. The filter traps particles larger than 3 microns.

**Fuel Supply Filter** – The fuel supply filter is mounted on the frame rail in the fuel supply line between the fuel tank and the fuel injector rails.

**Fuel Level Sensors** – A float and arm type fuel level sensor is used in the main fuel tank (4-tank model) and in the front tank of the rear tank assembly (both models).

**Fuel Pump** – The fuel pump is mounted inside of the fuel tank. The purpose of the fuel pump is to increase the line pressure of the liquid propane by 40-60 psi (275-414 kPa) over the internal tank pressure to ensure the propane is always maintained in a liquid state. The fuel pump inlet is submerged in liquid at all times by a baffle in the tank assembly. To service the fuel pump, remove the fuel tank internal components access cover plate.

**Fuel Lines (3-tank)** – The fuel lines are Type III LPG approved hoses with minimum permeability. The hoses are rubber-coated stainless steel braided to protect against chafing and have a burst pressure rating of 1,750 psi (12,066 kPa) **Fuel Lines (4-tank)** – The fuel lines consist of two flexible hoses, one inside of the other. The inner line supplies liquid propane to the injectors and the area between the inner line and the outer line is the fuel return passage.

**Fuel Injectors** -- Each fuel injector has a supply passage and a return passage. A passage between them is restricted by a cooling bushing. As liquid propane passes through the cooling bushing, pressure drops, the propane vaporizes and cooling occurs. This maintains the fuel in a liquid state, regardless of the outside temperature.

#### Fuel Transfer (4-tank model

**only)** – On the 4-tank system, the main tank controls all fuel delivery to the fuel injectors. When the liquid propane control module senses a difference in fuel level between the tanks, the secondary supply valve opens and the secondary fuel pump operates. Liquid propane is pumped from the rear tanks into the main tank.

**EVAP System** – The conventional EVAP control system has been disabled, with the exception of the EVAP purge solenoid valve. All EVAP DTCs also have been turned off, so there is no scan tool support. A unique EVAP subsystem maintains compliant levels of evaporative emissions.

#### LPG Maintenance Schedule

The LPG engine vehicle is designed for routine maintenance (fluids, filters, etc.) similar to gasoline engine vehicles.

The LPG fuel system requires replacement of the LPG fuel fill filter and LPG in-line fuel filter every 30,000 miles (48,280 km).

#### Training

For more information about the LPG system, refer to #PI0722 and view the Web-based training course 16240.65W, Liquefied Petroleum Gas (LPG) Fuel Systems, available at www.gmtraining.com.

#### Thanks to Sherman Dixon and Chris Graham

## Excessive Oil Consumption

Excessive oil consumption may be noticed on some 2010 Equinox and Terrain models equipped with the 2.4L direct-injected 4-cylinder engine (RPO LAF). In most cases, the oil consumption rate will be one quart or more every 1,000 miles (1,609 km). This condition may not be evident until the vehicle has accumulated 20,000 miles (32,187 km) or more. It may appear earlier if the drive cycle of the vehicle mainly consists of short trip driving (more thermal-cycles). Upon inspection, excessive oil in the fresh air side of the PCV system due to excessive crankcase pressure and blow-by may be noted. In addition, all four spark plugs will have obvious/excessive oil deposits on them.

If this condition is encountered, remove the spark plugs and inspect them for obvious/excessive oil deposits. If there is no sign of oil deposits on the spark plugs, perform an oil consumption test as outlined in the latest version of Bulletin #01-06-01-011 before proceeding.

If excessive oil consumption is verified by inspecting the spark plugs and/or performing an oil consumption test, perform the appropriate Service Information diagnosis for oil consumption and repair as necessary. If a single spark plug has obvious/excessive oil deposits, inspect the related valve seals to ensure that they are not missing, damaged, or torn and replace them as needed.

If the Service Information diagnostics does not isolate the cause of the condition and no obvious valve seal conditions are found, inspect the cylinder walls for obvious vertical "zebra stripes" as shown in the photo. In most cases, the cylinder head will have to be removed for inspection because these stripes may be hard to see with a bore scope. They also may not be apparent until the cylinder walls are cleaned with contact cleaner.



Vertical "zebra stripes" on the cylinder walls

If these stripes are NOT present, continue to follow the Service Information procedures and diagnosis to determine if there is another cause for the oil consumption, such as stuck rings, damaged rings, etc.

If these stripes ARE present, replace the engine using the latest part number listed in the parts catalog since this engine does not have serviceable cylinder liners like some of the other Ecotec engines. Before ordering the replacement engine, refer to #PIP5025 for additional information regarding engine replacement approval and installation.

#### S Thanks to James Parkhurst

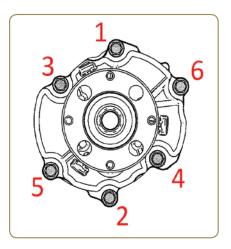
# Case 2:18-cv-14371-RLR Document 1-4 Entered on FLSD Docket 09/10/2018 Page 5 of 10 New Water Pump Bolts and Torque Specification

A new water pump fastening procedure has been implemented on all High Feature V6 engines (2.8L, 3.0L, and 3.6L) on all models (2004-2013 model years) to help reduce the potential for water pump gasket leaks. This new procedure requires NEW bolts to be used when attaching a water pump. It also requires a third pass with an additional 45 degree turn when tightening the bolts.

The new torque procedure puts the bolts into yield, so the bolts MUST be replaced when they are removed. Old/reused bolts will break if reinstalled. The following procedure applies to all model years and all RPOs of the HFV6 engine.

1. Ensure that the engine front cover and water pump are clear of old gasket material.

- 2. Ensure that the water pump mounting bolt holes in the front cover are completely clean and dry.
- 3. Place a new water pump gasket on the water pump.
- 4. Place the water pump in position on the front cover.
- 5. Install the water pump bolts finger tight.
- 6. Tighten the water pump bolts in sequence to 10 N·m (89 lb. in.).
- 7. Tighten the water pump bolts a second pass in sequence to 10 N·m (89 lb. in.).
- 8. Tighten the bolts a final pass in the sequence shown an additional 45 degrees.
- Thanks to Andy Waddell



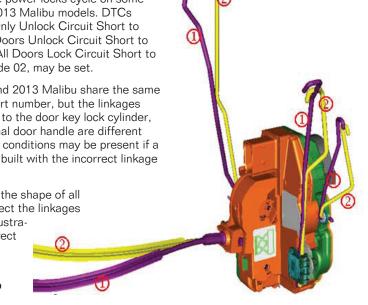
# Inoperative Auto Door Locks

The auto door lock/unlock feature may be inoperative and/or the power locks cycle on some 2012 LaCrosse and 2013 Malibu models. DTCs B3125 (Driver Door Only Unlock Circuit Short to Ground), B3130 (All Doors Unlock Circuit Short to Ground) and B3135 (All Doors Lock Circuit Short to Ground,) symptom code 02, may be set.

The 2012 LaCrosse and 2013 Malibu share the same Drivers Door Latch part number, but the linkages that connect the latch to the door key lock cylinder, lock button and external door handle are different for each model. These conditions may be present if a vehicle happens to be built with the incorrect linkage or linkages.

The illustration shows the shape of all linkages. Visually inspect the linkages and compare to the illustration to ensure the correct linkages are installed.

(•) Thanks to **Christopher Crumb** 



LaCrosse linkages are indicated in purple (1) and Malibu linkages are indicated in yellow (2).

# HVAC Mode Doors Inoperative

On a 2012 Enclave, Traverse or Acadia equipped with the automatic or manual HVAC system, the front or rear HVAC mode doors may be inoperative or may not function properly. DTC B3779 08 (Air Flow Control 9 Circuit Actuator Stalled) and other HVAC-related DTCs may be present.

The HVAC mode doors may not have been "learned" properly when the vehicle was built. Before replacing any components, attempt the Actuator Recalibration Procedure for the mode doors following the procedure in appropriate Service Information. If this does not correct the condition, continue with diagnosis and repair as necessary.

• Thanks to Jim Miller

## **Tire Pressure** Monitor Conditions

Some 2008 Aveo and G3/Wave models may have one or more of the following Tire Pressure Monitor (TPM) conditions:

- Unable to enter TPM Learn Mode
- The battery light is inoperative with the key on, engine off
- DTC C0779 (Unregistered ID Code) is set in the TPM Module

With the key on, engine off, check voltage on pin 7 of the TPM module. The reading should be 0.0 volts with the generator connector plugged in.

If battery voltage is present, ground pin B at the generator using a suitable terminal or probe and evaluate the battery light for proper operation on the instrument cluster. If the battery light is inoperative, check for an open in the brown circuit between the generator and the TPM module. Also check for proper operation of the voltage regulator internal to the generator.

If the condition is no longer present after grounding Pin B at the generator connector, replace the generator and verify repairs.

S Thanks to Bryan Brunner and Charles Hensley

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# Inoperative Fuel Gauge and Hard Start/No Start Condition

Some 2008-2012 Enclave, 2009-2012 Traverse, 2007-2012 Acadia and 2007-2010 Outlook models may exhibit one or more of the following conditions:

- Engine is hard to start
- · Engine will not start
- Engine starts, then stalls
- Fuel gauge is inoperative or fluctuates
- Service Engine Soon/Check Engine light is illuminated

These conditions, which may be intermittent and have various DTCs set, may be due to the fuel tank harness to body harness retainer slipping on the tubing, putting pressure on the harness and causing connector X305 to become partially separated or not fully seated.

Inspect connector X305 to make sure that it is fully seated. If the connector is not fully seated, inspect the terminals at connector X305 for corrosion. If the terminals show signs of corrosion, replace the corroded terminals.

Remove the wire harness retaining clip from the steel lines and reposition it in front of the steel line support to prevent it from sliding.

S Thanks to James Miller



Connector X305

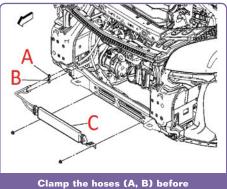


Move the wire harness retaining clip from the steel lines (1) to in front of the steel line support (2).

# Replacing a Power Steering Cooler

When replacing a leaking or damaged power steering cooler on a 2008-2012 Enclave, 2009-2012 Traverse, 2007-2012 Acadia or 2007-2010 Outlook, it is critical to replace the cooler without introducing a lot of air into the system.

When replacing a power steering cooler, first block off the hoses near the cooler connection with the appropriate clamps. Next, disconnect the cooler from the lines and remove the cooler.



Clamp the hoses (A, B) before disconnecting the power steering cooler (C).

Pre-fill the new cooler on the bench and cap off the pre-filled cooler ends for installation.

Install the new pre-filled cooler on the vehicle and remove the clamps on the hoses.

Once installation is complete, be sure to follow the Power Steering System Bleed Procedure in the appropriate Service Information

S Thanks to James Miller

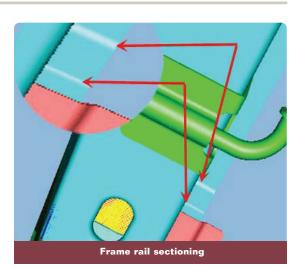
# Rear Frame Rail Sectioning Instructions

When sectioning the rear frame rail on a 2008-2012 Malibu, there may not be any die marks on the vehicle frame rail or the new part as indicated in Service Information. The die marks are not present because the exhaust hanger is attached to the frame where they would have been.

Locate the section that is about 60 mm wide between the exhaust hanger and the rear slot in the rail. Then, follow the sectioning directions in the appropriate Service Information procedure.

**TIP:** It is best to cut rearward of the bracket because of the flange change on the top of the rail.

S Thanks to Christopher Crumb

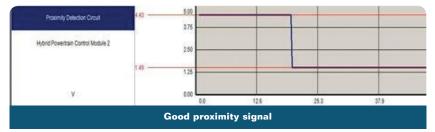


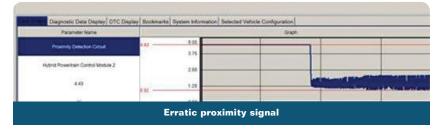
# Volt No Charge Condition

A no-charge condition may be found on some 2011-2012 Volts when using either the stationary 240V or the 120V charger. DTC P0D26 (Battery Charger System Precharge Time Too Long) may be set in the Hybrid Powertrain Control Module (HPCM) 2.

If a no-charge condition is experienced, follow these steps:

- 1. Check the last 8 digits of the VIN. If it is lower than VIN BU100954, perform the latest version of #PIP4875 to program the HPCM 2, along with the other modules. For vehicles built after VIN BU100954, proceed to step 3.
- 2. If the condition returns or the vehicle has already had #PIP4875 performed, perform step 3.
- 3. Plug in the 120V charger and note the behavior of the charge indicator light on the top of the instrument panel and the lights on the charge cord set. If the light on the instrument panel is not steady green during a charging event, and the two upper charge cord set lights are steady green, record a GDS 2 snapshot from the HPCM 2 monitoring the Battery Charger Control Module Data.





- 4. Review the snapshot and monitor the proximity detection signal for erratic operation during charging. Also manipulate the charge cord coupler (handle) in different directions and monitor for proximity voltage changes.
- 5. Refer to the following two photos that show a good proximity signal and a proximity signal that is erratic.
- If the snapshot shows the erratic signal, and/or the condition changes when the charge cord coupler (handle) is manipulated, or the proximity signal does not drop to a steady 1.49 volts, inspect the charge port receptacle and wiring.
- 7. Check the charge port receptacle connector for signs of water intrusion or corrosion in both the vehicle harness side and charge port side. If a condition is found, replace the receptacle and harness.
- 8. If no water or corrosion is found, test the resistance of all the charge port receptacle circuits to each other while disconnected from the Onboard Battery Charge Module (OBCM), the HPCM 2 and the charge port receptacle. All circuits should read open. If they do not, inspect the harness or connector for a short. Refer to the appropriate Service Information.
- 9. Check resistance and load test circuits 3837, 3838 and 3952 between the receptacle and the OBCM to isolate any charge cable wiring related concerns.
- 10.If none of the above lead to a resolution, continue with the published diagnostics for DTC P0D26.

#### $\mathfrak{S}$ Thanks to Charles Krepp

# Updated GM Accessory Installation Information

The installation procedures of several GM Accessories have been updated recently. Complete accessory installation information can be found in the appropriate Service Information.

# **Fullsize Truck Inclination Sensor** (P/N 17800432)

The mounting location of the sensor has been moved to the top of the BCM bracket. This reduces false alarm activation due to significant temperature differences between the vehicle cabin and outside ambient temperatures. The updated instructions can be found in the online Service Information – Accessory Manual (Theft Deterrent Vehicle Inclination Sensor Package Installation).

#### Verano Spoiler

(P/Ns 22791799 - 22791805)

The torquing sequence of the spoiler fasteners during installation has been updated. Failure to torque in the specified sequence can result in a "warped" appearance or breaking of the mounting studs. For updated instructions, go to the online Service Information – Accessory Manual (Rear End Spoiler Package Installation).

#### Malibu Molded Splash Guards

(P/N 22864060 - Rear/20995548 - Front)

The instruction sheets are being updated to clarify the installation steps to install the rear splash guards on new 2013 Malibu models. It is necessary to drill all holes used to mount the rear molded splash guard. There is an existing lower fastener on the vehicle that should not be used to install the rear molded splash guard. If the existing hole/fastener is used, it will skew the splash guard and create a gap condition at the top of the splash guard. The updated instruction sheets are viewable in the online Service Information – Accessory Manual (Molded Splash Guard Installation).

**Sonic Hatchback Spoiler Installation** (P/Ns 95942507, 95942508, 95942509, 95942510)

The initial shipments of parts do not include the installation sheet. Refer to the online Service Information – Rear End Spoiler Replacement for the removal and installation procedure. The existing fasteners used for the Original Equipment (OE) spoiler (4 screws and 3 nuts) can be reused to install the accessory spoiler. The Service Information procedure calls out the torque specifications for all fasteners.

(i) Thanks to Ann Briedis

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GM TechLink is published for all GM retail technicians and service consultants to provide timely information to help increase knowledge about GM products and improve the performance of the service department.

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Inclusion in this publication is not necessarily an endorsement of the individual or the company.

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# Sensing and Diagnostic Module Setup Procedure

On the 2013 Chevrolet Malibu Eco model. the SIR MIL may flash after the Sensing and Diagnostic Module (SDM) was reprogrammed if the SDM Setup is not able to be performed. No DTCs will set.

After successfully programming the SDM, the SDM must be allowed to go to sleep before the SDM Setup procedure can be attempted. Switch off the ignition, remove the key, and open and close the driver's door to disable Retained Accessory Power. This will allow the SDM to go to sleep and write new data to memory.

At this point, technicians may now enter the vehicle, turn the ignition switch on and perform the SDM Setup procedure.

S Thanks to Christopher Crumb

# Rear Defogger Inoperative

The rear defogger may be inoperative or the rear window glass may not clear on some 2012 Sonic models.

Inspect the terminals at the rear defogger grid. Be sure they are fully seated and that the terminals are not backed out of their connectors. Repair any loose terminals and/or connectors at the rear defogger grid. Do not replace the BCM.

Thanks to Ernest Haller

# Updated Volt Tire Pressures

The tire pressure specification on the 2012 Volt and beyond has been updated. The tire pressures should be set at 38 psi. The updated specification is reflected on the Tire and Loading Information label located on the driver's door pillar.

If the tire pressure monitor indicator icon is continuously illuminated after the instrument cluster bulb check is completed, a low tire pressure condition may be present. Check the tires for damage or leaks and inflate the tires to the correct specification.

Thanks to Ashmi Haria

# Poor Sound Quality from Speakers

There may be a poor sound quality condition on some 2013 Malibu models equipped with the navigation radio (RPO UEW):

- A vehicle equipped with base speakers (RPO UW6) may be muted (low volume) or there may be poor sound quality from the speakers
- A vehicle equipped with an amplifier (RPO) UQA) may be over-boosted (high volume) and may exhibit distortion or poor sound quality from the speakers



The radio may have been programmed with

the wrong calibration during assembly, causing these poor sound quality conditions.

Reprogram the radio (silver box) with the correct calibration listed below using TIS2WEB:

- Navigation Radio (RPO UEW) with base speakers (RPO UW6) Correct PN 20945590
- Navigation Radio (RPO UEW) with amplifier (RPO UQA) Correct PN 20945591
- Thanks to Christopher Crumb



#### Car Issues – Fix It Right the First Time

Model Year(s)	Vehicle Line(s)/Condition	Do This	Don't Do This	Reference Information/Bulletin
2012	Sonic — Receiving and cleaning dot on outside rear view mirror glass	Use high performance body solvent (Acrysol) and allow it to soak for 5 minutes before attempting to remove the dot on the outside rearview mirror glass	Replace the outside rearview mirror glass or assembly	PI0738
2010-2013	Malibu, Verano, Sonic, VOLT, Regal, SRX, Equinox, LaCrosse, Cruze — Rear doors intermittently will not open from inside and/or Electric Child Lock (ECL) LED light in the ECL switch flashing	Review with the owner that the handles must be released when the ECL button is pressed	Replace rear door latches	PI0737
2010-2012	Malibu — Power Steering or Reduced Power Message displayed in DIC, DTC C0475 or P2138 set	Inspect for and repair the water leak that caused the concern, look for signs of corrosion in electrical connectors	Replace the accelerator pedal or power steering control module without inspecting for water leak	PI0116B
2008-2012	CTS, CTS Sport Wagon, CTS-V, CTS-V Sport Wagon — Rear door glass lowers without window switch activation, especially after car wash or rain	Remove door trim fastener and seal per Pl	Replace door switch regulator	PI0734
2012	Regal, LaCrosse — MIL On, DTCs C0187, C0287 and C0196 set or stored in history	Reprogram the EBCM	Replace the yaw rate sensor or EBCM	PI0730
2012	Impala — MIL On, various DTCs set, IPC inoperative, display and/or BCM fuse blown	Follow bulletin to lift up / flip over harness to properly inspect all the wiring	Replace parts without inspecting harness	PI0631C
2011	Impala — Pop type noise when turning left or right	Inspect for engine oil leak	Don't overlook a possible leak prior to replacing any parts	PI0736
2012	Regal — Touch screen functions inoperable or radio cycles through screens without user input	Replace the trim panel	Replace the radio	PI0641A
2011-2012	Sonic, Cruze — Information for No Trouble Found turbochargers returned to Warranty Parts Center	Check oil feed pipe and oil return pipe when replacing turbo charger	Replace turbocharger just for cracks at the waste gate	PI0675A
2011-2012	VOLT, Sonic, Cruze — Information on servicing plastic components and transferring on a new service engine	Check condition of plastic parts when repairing vehicle for over heat condition	Transfer parts without inspecting for damage	12-06-01-005
2011-2012	Sonic, Cruze — Coolant leak at thermostat housing to cylinder head	Inspect seals for rolling and replace seals	Replace thermostat housing or thermostat	PI0721A
2010-2012	Camaro — Rear axle chatter noise on low speed turns	Replace the rear differential axle shaft seals and install Dexron oil	Replace the rear differential or the limited slip clutches	PI0137C
2012	Camaro — Passenger-side instrument panel ZL1 emblem peeling/falling off	Wait for the new part to be released. A bulletin will be released to advise on part availablity	Replace the appliqué with current SPO stock. The stock is being cleared and new stock will be available June 30, 2012. The part number will not change	PI0739
2006-2011	DTS, Allure — Side door sticks or may intermittently become inoperative from outside door handle in higher temperatures	Replace door outside handle and latches	Adjust the door handle or latch	09-08-64-035D

# Thanks for Your Survey Participation

The GM Electrical Diagnostic Workgroup would like to thank the technicians who took part in the Electrical Diagnostic three-question survey.

Because of the positive responses, in the future we will start adding the additional terminal information for the end-to-end continuity testing in the secondary test step. In some instances, this detail may still not be supported because of terminal complexity at the control module; in which case, the schematic will still need to be referenced to identify the correct terminal ID to conduct testing. Thanks for helping us make the right decisions when it comes to enhancing the electrical diagnostic procedures.

(\*) Thanks to Dave Nowak and the GM Electrical Diagnostic Workgroup

#### Truck Issues – Fix It Right the First Time

Model Year(s)	Vehicle Line(s)/Condition	Do This	Don't Do This	Reference Information/Bulletin
2006-2009	G8, H2, Yukon XL Denali, Yukon XL, Yukon Denali, Yukon, Sierra, Suburban, Silverado, Corvette, Escalade EXT, Escalade ESV, Escalade, XLR, XLR-V, STS, — Slips in Reverse or Third, delayed Reverse or Drive engagement, DTC P0776, P2715, P2723, harsh 2-3 shifts	While making repairs on a 6L80 / MYC-equipped vehicle, replace the transmission fill tube	Repair and install the transmission on 6L80 / MYC- equipped vehicles without replacing the fill tube	09-07-30-0041
2007-2013	Escalade, Escalade ESV, Escalade EXT, Sierra, Silverado, Suburban, Tahoe, Yukon, Yukon XL — Loss of power door lock function on one or several doors	Repair door lock knob interference	Replace the door lock/actuator	12-08-64-001
2008-2012	Sierra, Silverado — Weak/Dead Battery, No start/ battery drain, no crank with or without the following DTCs: U0140, U0151, U0164, U0168, U0214, U0155, U0184, U0194, U0198, B1019, U0170, C0561 in low speed modules	Check for the source of water leak if corrosion is found on RCDLR terminals	Replace the RCDLR without repairing the water leak	12-08-57-001
2007-2012	Tahoe - Police Pursuit Vehicle (PPV) — Engine mount clunk noise and/or leaking	Replace the hydraulic mount bushing with a solid mount bushing	Reinstall a hydraulic mount	12-06-01-004
2011	Escalade, Escalade ESV, Escalade EXT, Escalade, Escalade ESV, Escalade — Navigation radio will not display map data , message display is On	Order and install the 2012 MY navigation service compact flash card and load software into the radio	Replace the navigation radio	PI0504B
2011-2012	Escalade, Escalade ESV, Escalade EXT — Front door power window(s) operation slow, squeak, screech, squeal or scrape type noise	Remove the flashing from the window reveal molding/run channel area	Replace the molding or window regulator	PI0728
2012	Canyon, Colorado, Express, Savana, Sierra, Silverado — MIL with DTC P0741 set, harsh 1-2 shift	Replace the TCC enable solenoid and internal wiring harness	Replace the torque converter	PIP5009D

#### 10212.07D Emerging Issues July 12

July 12, 2012

Service Know-How To view Emerging Issues seminars:

Log in to www.gmtraining.com, select Service Know-How/ TECHAssist from the menu, select Emerging Issues, and then Searchable Streaming Video to choose the current Emerging Issues seminar or past programs. Case 2:18-cv-14371-RLR Document 1-5 Entered on FLSD Docket 09/10/2018 Page 1 of 11

# EXHIBIT 3



# All-New2014

The all-new 2014 Silverado 1500 and Sierra 1500 arrive first as a crew-cab, followed soon by a regular cab and a double cab, which replaces the extended cab of previous years. Early buyers can choose from either a 4.3L V6 engine or a 5.3L V8 engine. A new 6.2L V8 engine will follow later. In the U.S., these

> trucks include standard scheduled maintenance for two years or 24,000 miles.

#### **New EcoTec3 Engines**

Three all-new EcoTec3 engines will be offered. Refer to the accompanying article for more details on these new engines.

The new 4.3L V6 is a state-of-the art truck engine with 285 horsepower and 305 lb.-ft. of torque (413 Nm), the most torque of any standard V6. This engine is E85 capable.

The new 5.3L V8 generates 355

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horsepower and 383 lb.-ft. of torque (519 Nm). With an EPA-estimated fuel economy rating of 23 mpg highway (2WD), it has the best fuel economy of any V8 pickup.

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# & GMC Sierra 1500

Chevrolet Silverado 1500

# MDI Express Exchange Program

Bosch now offers GM dealerships in the U.S. and Canada an Express Exchange Program for the MDI (Multiple Diagnostic Interface) tool for out of warranty units.

For a cost of \$395 (U.S.) plus freight, a dealership in the U.S. can order a replacement MDI and receive it the next day (In Canada, orders received before 1:00 PM (ET) will be shipped the same day). The dealership will return the faulty unit with the included UPS shipping label. The replacement unit comes with a 90-day repair warranty.

No USB, DLC or power cords are sent with the replacement unit and dealerships should retain their cables as well.

If Bosch receives a counterfeit MDI in their repair center, the dealership will be contacted and charged a diagnostic fee. The counterfeit MDI will be returned to the dealership. The dealership will no longer be eligible for the Express Exchange Program.

The standard replacement option is still available. Using this method, a dealership sends the faulty unit to Bosch.

Once the fault is determined, Bosch will contact the dealership with the repair cost, fix the unit and ship it back.

For any questions about the MDI Express Exchange Program, contact the Techline Customer Support Center (TCSC) at 1-800-828-6860 (English) or 1-800-503-3222 (French).

S Thanks to Chris Henley



# 2014 Silverado 1500 and Sierra 1500 1 MDI Express Exchange Program 1 Trio of New EcoTec3 Engines 3 Poor Radio Reception 4 dexos1 0W-20 Engine Oil 5 Unexpected Stability Control Activation 5 Trunk Lid Does Not Self-Raise 5 New GM Field Product Reporter App 6 Annual Technician Survey in September 7 2.4L Ecotec Engine Oil Consumption 7 Accessory DVD Screens Will Not Power Up .8 Common Cruze Diesel Noises. 8 Folding Top Leans during Top Cycle .8 Folding Top Calibration .8 Swapping Outside Rearview Mirrors. .9

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(Canada's EnerGuide estimated fuel consumption is  $13.0 L/100 \, \text{km}$  city and  $8.7 L/100 \, \text{km}$  highway.) It's also E85 capable.

The new 6.2L V8 will be available later this year.

#### **New Fluids**

New synthetic axle gear oil is used on the 2014 Silverado and Sierra. The new synthetic axle gear oil is a 75W85 viscosity. In the United States, use GM P/N 19300457. In Canada, use GM P/N 19300458

**TIP:** DO NOT use any axle gear oil other than the part numbers specified.

A new brake fluid also is used for 2014 that has enhanced corrosion inhibitors and significant improvements in lubricity that are engineered to eliminate master cylinder squeak/noise.

In the U.S., use brake fluid GM P/N 19299818. In Canada, use GM P/N 19299819.

**TIP:** DO NOT use any brake fluid other than the part numbers specified.

#### **Brakes**

The 2014 Silverado and Sierra have a TRW EBC460 4-wheel disc brake antilock brake system (ABS) with Duralife™ brake rotors.

The Duralife brake rotors — a GM-exclusive technology — feature a hardened and strengthened surface to reduce corrosion. Duralife brake rotors are expected to last twice as long as conventional rotors and provide quieter braking with less vibration.



The electronic brake control module and the brake pressure modulator are serviced separately. The brake pressure modulator uses a four-circuit configuration to control hydraulic pressure to each wheel independently. Depending on options, the following additional vehicle performance enhancement systems are available:

- Dynamic Rear Proportioning
- Hill Descent Control System
- Hill Hold Start Assist
- Cornering Brake Control
- Hydraulic Brake Assist
- Optimized Hydraulic Braking System
- Intelligent Brake Assist
- Integrated Trailer Brake Control System
- Trailer Sway Control

#### **Electric Power Steering System**

The belt-driven electric power steering system features an integrated electromechanical power steering unit, containing the power steering control module, its sensors, the power steering motor, a belt drive and a ball nut mechanism.

The power steering control module is part of the power steering assist motor assembly and is replaceable as a complete unit independent of the steering gear assembly. The torque sensor is integrated with the steering gear pinion and is serviced as part of the steering gear.

The power steering control module has a software feature referred to as Smooth Road Shake Compensation that reduces steering wheel vibration caused by an imbalance from the front tire/wheel assemblies. The vibration transmitted to the steering wheel is referred to as Smooth Road Shake and is a phenomenon that occurs only at highway speeds and on smooth roads. The power steering control module employs active controls to sense and reduce the periodic torque component applied to the steering wheel caused by the wheel imbalance force. This software feature will compensate for a specific range of imbalance. If the imbalance is above a certain level, the power steering control module will disable the smooth road shake compensation and set DTC C044B (Steering Assist Smooth Road Shake Compensation Disabled Too Many Transitions) to indicate that it has been disabled.

In addition to smooth road shake, road crown is compensated for by the steering wheel angle sensor signal, which calculates the intended driving direction. The Electronic Brake Control Module (EBCM) receives serial data message inputs from the steering wheel angle sensor. The steering wheel angle sensor does not require centering often. However, if the steering wheel angle sensor is not correctly centered it may create a lead/pull condition. If this condition is encountered, always perform the Steering Angle Sensor Centering procedure in SI before performing a wheel alignment.

#### **Driver Assistance Systems**

Some driver assistance features alert the driver of obstacles by beeping or, if equipped with the Safety Alert Seat, the driver's seat cushion may provide a vibrating pulse alert.

The Forward Collision Alert (FCA)

**System** provides a red flashing alert on the windshield, and beeps or pulses the Safety Alert Seat when approaching a vehicle directly ahead too quickly. FCA is a warning system only and does not apply the brakes.

TIP: FCA may provide unnecessary alerts for turning vehicles, vehicles in other lanes, objects that are not vehicles, or shadows. These alerts are normal operation and the vehicle does not need service.

**Collision Alert** flashes six red lights on the windshield when the vehicle approaches another vehicle too rapidly. In addition, either eight beeps will sound from the front, or both sides of the Safety Alert Seat will pulse five times.

**The Tailgating Alert** will display the Vehicle Ahead indicator in amber when following a vehicle ahead much too closely.

The Lane Departure Warning (LDW)

system is designed to help avoid crashes due to unintentional lane departures. LDW uses a camera sensor on the windshield ahead of the rearview mirror to detect the lane markings.

**The Rear Vision Camera** displays an image of the area behind the vehicle in the center stack display when the vehicle is shifted into Reverse. The camera and Rear Park Assist will not work properly if the tailgate is down.

#### Ultrasonic Rear Park Assist (URPA) and Front Park Assist

operate at speeds of less than 5 mph (8 km/h) and detect objects 10 in (25 cm) high off the ground and below bumper level, using the sensors on the bumpers. URPA detects objects up to 8 ft (2.5 m) behind the vehicle, and Front Park Assist detects objects up to 1.2 m (4 ft) in front of the vehicle. These detection distances may be less during warmer or humid weather.

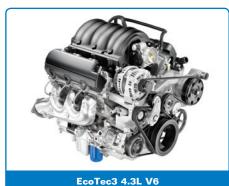
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# Trio of New EcoTec3 Engines Power 2014 Silverado 1500 and Sierra 1500

The 2014 Chevrolet Silverado 1500 and GMC Sierra 1500 deliver more power, more torque and improved fuel efficiency, thanks in part to a trio of all-new EcoTec3 engines.

The new engine family includes a 4.3L V6, a 5.3L V8 and a 6.2L V8.





EcoTec3 engines feature three state-ofthe-art technologies — direct injection, V4 Active Fuel Management (cylinder deactivation) and continuously variable valve timing — to make the most of power, torque and efficiency across a broad range of operating conditions.



EcoTec3 6.2L V8

The new 4.3L V6 is a state-of-the-art truck engine that delivers the most torque of any standard V6.

Engine type	90° V6
Displacement	4.3L
Bore x stroke	99.6 mm x 92 mm 3.9 in x 3.6 in
Block material	Aluminum
Cylinder head material	Aluminum
Fuel delivery	SIDI/E85 compatible
Compression ratio	11.0:1
Firing order	1-6-5-4-3-2
Horsepower	205.94 KW/280 Hp
Torque	393.17 N·m∕290 lb ft @4000 RPM

The new 5.3L V8, with an EPA-estimated fuel economy rating of 23 mpg highway (2WD), offers the best fuel economy of any V8 pickup, and beats the fuel economy estimates of the Ford EcoBoost V6. (Canada's EnerGuide estimated fuel consumption is 13.0L/100km city and 8.7L/100km highway.)

Engine type	90° V8
Displacement	5.3L
Bore x stroke	96 mm x 92 mm 3.77 in x 3.62 in
Block material	Aluminum
Cylinder head material	Aluminum
Compression ratio	11.0:1
Firing order	1-8-7-2-6-5-4-3
Horsepower	257 kW/350 Hp @ 5600 RPM
Torque	508 N·m/375 lb-ft @ 4000 RPM

The new 6.2L V8 will be available later this year. Vehicles equipped with the 6.2L V8 engine MUST use premium unleaded gasoline with a posted octane rating of 91 or higher. This engine is NOT E85 capable.

#### **Active Fuel Management**

Cylinder deactivation, also known as Active Fuel Management, is now standard on all three engines. The system uses oil pressure, controlled by the Powertrain Control Module, to deactivate the lifters on selected cylinders, closing the valves for those cylinders. It deactivates four of the cylinders on the V8 engines and two cylinders on the V6 under light load conditions — operating the engines as a V4 and seamlessly reactivates the cylinders when the driver demands greater power. The transition takes less than 20 milliseconds and is imperceptible.

#### **Aluminum Engine Blocks**

All three engines use lightweight aluminum blocks with cast-in iron cylinder

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# 2014 Silverado 1500 and Sierra 1500 - continued from page 2

#### **Stronger and Quieter**

The new cab of the 2014 Silverado and Sierra is stronger, with nearly two-thirds of the structure made from high-strength steel. Similarly, the main rails and key cross members of the updated frame are high-strength steel with major elements hydroformed for reduced mass and improved strength.

In addition, new shear-style body mounts tune out both up-and-down and sideto-side movement for a quieter, more comfortable ride. Double cab and crew cab models have a set of hydraulic rear body mounts to further isolate the cabs.

 ${\displaystyle \textcircled{}}$  Thanks to Peter Joslyn and Sherman Dixon



updated frame are high-strength steel.

liners. The deep-skirt block design helps maximize strength and minimize vibration. Cross-bolted main bearing caps are secured to the block with four main bolts and two cross bolts each. A structural aluminum oil pan further stiffens the bottom of the block.

#### **Advanced Oiling System**

The oiling system incorporates a new variable displacement two-stage vanetype oil pump that enables more efficient oil delivery, based on the engine's operating conditions. Its dual-pressure control enables operation at a very efficient oil pressure at lower rpm, and then delivers higher pressure at higher engine speeds.

An oil control solenoid valve, controlled by the Engine Control Module (ECM), mounted to the oil pump provides twostage functionality. The oil pump is mounted on the front of the engine block and driven directly by the crankshaft sprocket. The pump rotor and vanes rotate and draw oil from the oil pan sump through a pick-up screen and pipe. The oil is pressurized as it passes through the pump and is sent through the engine block lower oil gallery.

Pressurized oil is directed through the engine block lower oil gallery to the fullflow oil filter and then to the upper main oil galleries and the valve lifter oil manifold assembly.

An oil passage at camshaft bearing location permits oil flow into the center of the camshaft. Oil enters the camshaft, exiting at the front and into the camshaft position (CMP) actuator solenoid valve. The CMP valve spool position is controlled by the ECM and CMP magnet. When commanded by the ECM, the CMP magnet repositions the CMP actuator solenoid valve spool directing pressurized oil into the CMP actuator to control valve timing.

#### dexos 1<sup>™</sup> Engine Oil

**TIP:** Failure to use the recommended engine oil and correct viscosity or its

equivalent can result in engine damage not covered by the vehicle warranty.

The dexos1 specification was uniquely designed to complement the exacting requirements of GM's advanced engine technology. The specification has gone through an extensive developmental and testing process. Only those oils displaying the dexos1 trademark and a registered trademark logo on the front label of the container meet the demanding performance requirements and stringent quality standards set forth in the dexos1 specification.

SAE 5W-30 is the required viscosity grade for the 4.3L engine.

SAE 0W-20 is the required viscosity grade for the 5.3L and 6.2L engines.

DO NOT use other viscosity grade oils such as SAE 10W-30, 10W-40, or 20W-50.

The engine oil with filter capacity has increased significantly from model year 2013 to model year 2014.

4.3L V6	6.0 qt (5.7 L)
5.3L V8	8.5 qt (8.0 L)
6.2L V8	8.5 qt (8.0 L)

#### Instrument Cluster Oil Pressure Gauge

The oil pressure gauge needle oscillation is due to the two-stage oil pump self test. The ECM will perform a functionality test of the two stage oil pump after a cold soak, when the engine is first started and the vehicle is driven.

This functionality test will occur three times in a short time span and can be observed on the oil pressure gauge as a brief increase (spike) in the oil pressure gauge needle. Upon completion of the three tests, the self test will not occur again until after the engine is turned OFF and another cold soak has completed.

**TIP:** The exception to this self test occurs if the vehicle has come to a stop

BEFORE the three tests have been completed. If that occurs, the self test will run again until the test can complete.

Additionally, at 3,500 RPM or greater, the two-stage oil pump switches over to high stage and the oil pressure gauge needle will move to the high position.

#### **Exhaust Manifolds**

The exhaust manifolds were developed to improve durability and sealing and reduce operating noise. The cast iron manifolds feature saw cuts along their cylinder head mounting flange, which split the flange into three separate sections on the V6 engines and four separate sections on the V-8 engine, allowing each section to move under extreme hot-cold temperature fluctuations to virtually eliminate movement of the exhaust manifold gaskets.

#### **Flexible Fuel Sensor**

The flexible fuel sensor of the 4.3L V6 and 5.3L V8 measures the ethanol-gasoline ratio of the fuel being used in a flexible fuel (E85 capable) engine. Flexible fuel vehicles can be operated with a blend of ethanol and gasoline, up to 85 percent ethanol.

Since the flexible fuel sensor measures the actual percentage of ethanol in the fuel, it is no longer necessary to wait for an empty fuel tank in order to refill with E85. The flexible fuel sensor measures the two different fuel related parameters, and sends an electrical signal to the ECM to indicate ethanol percentage and fuel temperature.

The flexible fuel sensor uses quick-connect style fuel connections, an incoming fuel connection, and an outgoing fuel connection. All fuel passes through the flexible fuel sensor before continuing on to the fuel rail.

(\*) Thanks to Peter Joslyn and Sherman Dixon

# Poor AM/FM Radio Reception

On some 2010-2013 LaCrosse, 2011-2013 Regal and 2013 Malibu models, the radio may have poor AM or FM radio reception. When using the Seek or Scan feature, only a few stations can be found.

Diagnosis of radio reception should begin with an inspection of radio signal strength using GDS2. Check the Radio Data Display listed on GDS2. Signal strength values can be compared with a known good vehicle set to the same radio station. If signal strength values are low on a strong radio station, inspect for proper orientation of the antenna connector at the back glass antenna grid.

**TIP:** Back glass antenna grids are located on the upper portion of the glass.

The antenna connector may have been plugged into the rear window defroster grids and not the antenna grid.

A proper connector orientation will have the neck of the connector facing outward towards the C pillar.

S Thanks to David Roat

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# Frequently Asked Questions: dexos1™ OW-20 Engine Oil



**A:** The new 5.3L and 6.2L V8 EcoTec3 engines available in the new 2014 Silverado 1500 and Sierra 1500 trucks are the most fuel efficient and technologically advanced engines in the market. These engines feature an advanced combustion system that maximizes the potential of the direct injection (DI) fuel system, active fuel management (AFM), variable valve timing (VVT), two stage oil pumps and other technologies. The dexos1 0W-20 oil supports these technologies and is an enabler for the engines' improved fuel economy performance.

# Q: Are other automobile manufacturers recommending 0W-20 engine oil for their products?

**A:** Some other manufacturers are already recommending 0W-20 engine oil for their products. General Motors expects this to become an industry trend and more automobile manufacturers will be recommending the use of 0W-20 engine oil in the future.

#### Q: What do the numbers 0W-20 represent?

**A:** 0W-20 represents the standard SAE measurement of oil viscosity. Viscosity is a measurement of the oil's resistance to flow. The more resistant the oil is to flow, the higher its viscosity.

# Q: If dexos1 0W-20 oil is recommended for a vehicle's engine, does it have to be used?

**A:** Yes. As an example, the 5.3L and 6.2L V8 EcoTec3 engines were designed, engineered, validated and EPA certified using dexos1 0W-20 oil. This is the ONLY oil approved for these engines. Another oil, such as 5W30, that may be more widely available should not be used in place of dexos1 0W-20 oil.

GM Powertrain also has approved the use of 0W-20 oil for applications specifying 5W-20 oil.

# Q: What if the engine is low on oil and dexos1 0W-20 oil is not available to top off the oil level?

A: There are many different GM licensed oil products that meet the dexos1 specification. If one cannot be located, a GF5 Synthetic grade 0W-20 oil that meets the dexos1 specification, such as Mobil 1<sup>™</sup> 0W-20 Advanced Fuel Economy synthetic oil, can be used. It meets or exceeds International Lubricant Standardization and Approval Committee (ILSAC) GF-5 requirements. If a different viscosity oil is added to the engine other than dexos1 0W-20 oil, GM recommends that an oil change be performed as soon as practical, but no longer than the next scheduled oil change in order to return the engine to the original dexos1 0W-20 oil factory requirements.

# Q: When will dexos1 0W-20 oil be available to Service Agents (Dealerships)?

**A:** In the United States, dexos1 0W-20 oil is currently available at retailers nationwide in 1 quart and 5 quart containers. In the United States, Mobil 1 0W-20 oil is currently available in quart/drum/bulk through the GM Oil Program.

In Canada, Mobil 1 0W-20 oil is currently available in 1 L and 4.4 L sizes through the GM Oil Program.

In the United States and Canada, Customer Care and Aftersales will release pricing and availability for ACDelco dexos1  $^{\text{\tiny M}}$  0W-20 oil as soon as it becomes available.

S Thanks to Sherman Dixon

# Unexpected Stability Control Activation

A brief, intermittent grind or ABS pump motor noise may be heard from the front of some 2008-2012 Malibus when maneuvering through banked turns, usually between 20–30 mph (32–48 km/h). In addition, the Stability Control MIL may be flashing along with possible throttle reduction when maneuvering through slightly banked turns at reasonable speeds.

These conditions normally correspond with no reported Electronic Brake Control Module (EBCM), ABS or Stability Control DTCs set as current or history DTCs. The conditions can be easily duplicated on the same roadway.

The current EBCM Stability Control System calibration is detecting a "Banked Bend" maneuver, resulting in the activation of the Stability Control system with possible throttle reduction. Do not attempt to replace the EBCM or Brake Pressure Modulator Valve (BPMV) for these conditions. The EBCM and BPMV are on part restriction and will not be released for this condition.

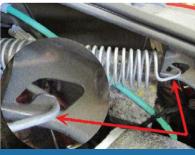
An updated EBCM module calibration is now available using TIS2Web. This new calibration will eliminate or diminish the throttle reduction for these banked road driving conditions or maneuvers.

In some cases, the flashing Stability Control MIL may still be observed. As stated in the Owner Manual, the StabiliTrak system activates whenever the computer senses a difference between the intended path and the direction the vehicle is actually traveling. This should be considered normal operation.

S Thanks to Christopher Crumb

# Trunk Lid Does Not Self-Raise

It may be noticed that the trunk lid does not selfraise to the full upright position when released on some 2014 Impalas (new body style). This applies only to vehicles with factory-installed rear spoilers or dealer-installed



The trunk lift springs should be in the rear position.

GM Accessory rear spoilers.

Check for the proper position of both trunk hinge springs. There are two possible tension settings for the springs that will affect the speed the trunk lid will open.

It will be necessary to loosen and reposition the trunk trim to gain access to the trunk hinge springs. The springs should be in the most rearward slot as shown if the vehicle is equipped with a rear spoiler. If adjustment is necessary, refer to the appropriate Service Information procedure.

S Thanks to Christopher Hightower

#### Case 2:18-cv-14371-RLR Document 1-5 Entered on FLSD Docket 09/10/2018 Page 7 of 11

# Submit Field Product Reports with New GM Field Product Reporter App

A new GM Field Product Reporter mobile application (app) has recently been released (available in the U.S. only) to make it easy to create and submit field product reports. The new app is free and available for use on Apple and Android mobile devices. Although optimized for smartphone use, the app can be used on tablets as well.

The new app can be downloaded from the Google Play Store (Android) and App Store (Apple.) Please note that with the large variety of phones and operating systems, not all functionality will appear/operate the same on all devices. Comments on the operation of the app should be sent to FieldProductReporterFeedback@gm.com.

Once downloaded onto your mobile device, the app can be used by dealership personnel to submit field product reports on GM products. communicating Condition. Cause and Correction information along with a Job Card number (Repair Order number). TAC Case number. Part number and additional comments.

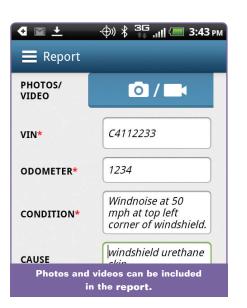


**TIP:** For information and guidelines

on submitting field product reports, refer to Bulletin #02-00-89-002: Information for Dealers on How to Submit a Field Product Report.

To use the new app:

- 1. Download the app on your device
- 2. Open the app
- Log in to the app by using your GlobalConnect ID and password
- 4. Enter the user profile information (You will only be asked for the user profile information upon initial log-in. User profile information can be changed at any time by going to the user profile screen available from the main menu.)
- 5. You are now ready to begin using the app



#### **App Tips**

- Up to six photos and up to 30 seconds of video can be submitted
- Fields highlighted with a red asterisk are required (VIN, Odometer, and Condition)
- The full VIN or last eight digits of the VIN can be entered (VIN confirmation and/or lookup from the last eight digits will occur on the final step prior to submission of the report.)
  - Once "Review/Email" is selected, if more than one vehicle shares the last eight VIN digits provided, one of the complete VINs shown must be selected
- After selecting "Review/Email," depending on your mobile device, you may be presented with a choice as to which email function to use to send the report (e.g. Gmail, etc.). A selection must be made from the choices given.

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Product Information:	BAC: 111111	
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Condition: TEST	Product Information:	
Cause: POOR GAPS IN LEFT FR	VIN: 1G1JA5SH3C4101234	
DOOR	Odometer: 123	
Correction:	Condition: Test of fpr	
Job Card#:	Cause:	
TAC Case#:	Correction:	
Part#:	Job Card #: TAC Case #:	
Comments:		
	l icon (depending on device)	
to submit the report.		

- Once an email selection is made (if required), a preview of the report will be shown. From this window, select "Send" or the Send icon on the screen. Do not use the phone's menu button, back button, etc., as this will not send the report. The only way to send the report is to use the Send function on the screen. Depending on the device, the Send icon may vary (i.e., it may be an arrow, a mail icon with an arrow underneath, a Send button, etc.)
- After sending a report, all photos and videos will be deleted from the device. To save a copy of the report or send to additional addresses, add the addresses at the "To:" line at the top of the review screen.

In addition to the new GM Field Product Reporter app, field product reports can still be submitted electronically via email.

We hope that you will take advantage of this new functionality as we continually try to make it easier and more convenient to communicate product issues in a timely manner, leading to faster resolution and enhanced customer satisfaction.

Thanks to Tod Stump

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# Annual Technician Survey in September

Over 11,000 technicians from 17 Original Equipment Manufacturers (OEM) responded to the 2012 Technician Feedback Survey. More than 1,500 of them were GM technicians. The 2013 survey will take place beginning in September. You're encouraged to voice your opinion. In Canada, GM technician participation is being considered for the 2013 survey.

The survey focuses on factors impacting technician retention, training, rewards/recognition programs, job motivations, and career paths.

As a result of feedback from the 2012 survey, some of the solutions implemented recently by the GM Service Technical College (STC) include:

Feedback indicated a need for clarity on annual training requirements. As a result, GM introduced a Path to 100% button for technicians and service managers that quickly identifies the courses required to achieve 100% STS and the order in which they should be completed.

- A preference was shown for hands-on training delivered in a conveniently located training center. To address this, additional hands-on courses Advanced Technology and eAssist courses were offered at all satellite training centers. In addition, two additional satellite training centers were opened in Des Moines, Iowa and St. Louis, Missouri.
- Survey participants requested an improved recognition program. STC launched a new recognition program (Bronze/Silver/Gold) to recognize technicians earlier in their careers while complementing the existing Master Technician and World Class Technician Certification levels and integrating with Mark of Excellence. The Center of Learning also has high quality, printable certificates of achievement that can be downloaded from the Learning Management System (LMS).

Look for more information soon about how to participate in the next annual survey in September.

S Thanks to Chris Wallace

# 2.4L Ecotec Engine Oil Consumption

Excessive oil consumption on some 2010-2013 LaCrosse, Equinox, Terrain and 2011-2013 Regal models equipped with the 2.4L engine (RPOs LAF, LEA) does not require engine replacement. If excessive oil consumption is confirmed after an oil consumption test, new pistons and piston rings should be installed.

#### **Piston Ring Coating**

The top compression ring in the new kit has a more robust coating on it that is designed not to wear as quickly as the original coating. Tests indicate that it wears about 4–5 times longer than the original coating.

If the top compression ring is worn, it will allow combustion pressure past it, which causes the oil control rings to be less effective and results in excessive oil consumption.

On 2010-2011 vehicles built before March 2011, there is a strong correlation between leaking high pressure fuel pumps diluting the oil and causing the ring wear. Due to this, check the fuel pump, balance chain, balance chain tensioner and timing chain for the proper part numbers. The updated fuel pump has an enhanced seal.

If these updated parts have not been installed during a previous repair, they should be replaced when the pistons and rings are replaced. Use field action #12313 if the balance chain and/or fuel pump is replaced.



Zebra stripping on the bore surface

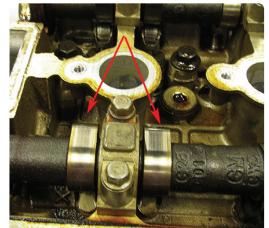
#### Zebra Stripes

The pistons must be replaced because as the rings wear down, it starts to widen the piston ring groves. The worn grooves will not retain the new rings correctly.

The "zebra" stripping on the bore surface is not an indication of a cylinder bore abnormality, but rather a transfer of the ring material as it was worn down. The bores are still uniform and the new rings seal. The validation of the new ring pack was done on used blocks that had zebra striping. It's not necessary to do any surface treatment to the zebra striped bores when installing the new pistons and rings.

TIP: Use only plastic scrappers to clean the sealing surfaces of the engine. Cleaning wheels and pads will leave material in the engine. An indication that cleaning wheels/pads were used will be an engine that runs for 2,000–4,000 miles after the piston/ring replacement and then develops an oil pressure condition or rod/ main bearing knock for a worn bearing.

Refer to Bulletin #13-06-01-003B for additional information, including several other parts — such as balance chain guides and



timing chain guides — that should be inspected for excessive wear as well as normal wear markings of other components, such as markings on the camshafts and roller follower.

Thanks toRon Caponey

Normal camshaft markings

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# Accessory DVD Screens Will Not Power Up

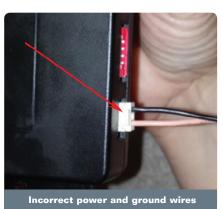
The accessory headrest DVD screens (RPO UJ5 or ACO) may not power up after installation in some 2014 Enclave, Traverse and Acadia models. On headrest DVD kits built prior to June 21, 2013, the power and ground wires may be reversed in the accessory wiring harness.

Using a small flat-bladed screwdriver, technicians should release the terminal tabs to remove and swap the power and ground wires.

- On the white connector on the end of power harness, use a flat-bladed screwdriver to gently lift up on the plastic lock tabs of the metal lock ridges of the pin.
- Remove the power (red +) wire from cavity #1 and the ground (black -) wire from cavity #3 of the connector.
- With the power (red +) and ground (black -) wires removed, gently press the plastic tabs back into place where they form a level plain with the connector.
- Insert the power (red +) wire into cavity #3 and ensure it is locked in place. Insert the ground (black -) wire into cavity #1 and ensure it is locked in place. When the wires are properly seated, the metal lock ridges of the pins will be visible with the plastic locking tabs located to the aft of the metal ridges.

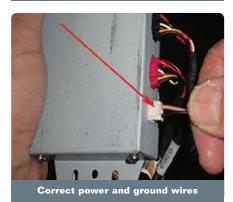
For additional information, refer to #PI1008.

 ${\scriptstyle \textcircled{\sc os}}$  Thanks to Gary McAdam





Remove the power (red +) wire from cavity #1 and the ground (black -) wire from cavity #3.



## Common Cruze Diesel Noises

The 2014 Cruze equipped with the 2.0L 4-cylinder diesel engine (RPO LUZ) may exhibit some noises shortly after the vehicle has been turned off.

There are several components that may produce noises, such as squeak, chirp, moan, whine or buzz noises, that may be heard after turning off the engine. The following noises are considered normal operating characteristics of the vehicle.

- The Throttle Body/Throttle Valve may be heard cycling or sweeping after the engine is shut down. This may last about 15 seconds and may be heard cycling or sweeping 5–10 times. The throttle body performs a self cleaning followed by an offset learn procedure after the engine is shut off.
- The Exhaust Gas Recirculation (EGR) Valve may be heard opening and closing after the engine is shut down. This may last about 15 seconds and may be heard about five times. The EGR valve is opening and closing to learn the position offset.
- The Intake Manifold Runner Control Valve Actuator may be heard cycling. This may last about five seconds. This is done as an integrity check and to confirm that the mechanical link between the actuator and the intake manifold runner is still connected.
- The Fuel Rail Pressure Control Valve may be heard making a whining noise. This may last about 15 seconds. The Fuel Rail Pressure Control Valve is pressurizing/controlling the flow of the fuel.
- The Diesel Exhaust Fluid (DEF) Pump and DEF Reverting Valve may be heard from the rear of the vehicle. This may last about 45 seconds. When the vehicle is turned off, the DEF pump and reverting valve operate to relieve the DEF system pressure and to clear the lines of DEF. The reverting valve is opened to relieve the pressure and send the fluid back to the DEF tank, and then the reverting valve is closed once the DEF lines are clear.
- The Air Conditioner (A/C) Compressor Electronic Control Valve may be heard making a whining noise. This may last about five minutes. The electronic control valve inside the air conditioner compressor may remain energized after the engine is shut down.
- Thanks to John Stempnik

# Folding Top Leans during Top Cycle

The convertible folding top on some 2011-2013 Camaro Convertibles may lean to one side when opening or closing the folding top. This condition may be caused by a ball socket that has separated from either the left or right hydraulic cylinder.

Inspect the hydraulic cylinders for proper attachment to the folding top frame assembly. If the cylinder has separated from the folding top frame, replace the retainer and reinstall the cylinder to the frame assembly.

#### S Thanks to Jeremy Richardson

# Folding Top Calibration

Some 2013 Camaro Convertibles may have an intermittently inoperative folding top. DTC B3680.01 (Folding Top Pump Motor Circuit Short to Battery) may be stored as a current or history DTC, depending on whether or not the condition is present.

Do not replace the folding top pump motor or the folding top control module for this condition. Replacing these components may fix the condition temporarily, but will not provide a permanent correction.

A new calibration is available to correct the inoperative folding top. Reprogram the folding top control module following the procedure for Folding Top Control Module Programming and Setup in the appropriate Service Information.

(•) Thanks to Jeremy Richardson

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GM TechLink is published for all GM retail technicians and service consultants to provide timely information to help increase knowledge about GM products and improve the performance of the service department.

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## Swapping Outside Rearview Mirrors

Owners of 2007-2013 Avalanche, Silverado 1500, Sierra 1500; 2007-2014 Silverado 2500/3500, Suburban, Tahoe, Sierra 2500/3500, Yukon, and Yukon XL models equipped with RPOs DL3, DL8, or DPN mirrors without Side Blind Zone Alert (RPO UFT) may request to have a different style mirror installed on their vehicle or request a different mirror before they purchase the vehicle.

**TIP:** Swapping mirrors on vehicles equipped with Side Blind Zone Alert (RPO UFT) is NOT recommended as the Side Blind Zone Alert system would be disabled.

When swapping mirrors on a vehicle, the first thing that needs to be known is if the vehicle is equipped with door modules. The easiest way to determine if the vehicle has door modules is to use the Tech 2 and try to communicate with the "Drivers Door Switch" and "Passenger Door Switch." If the Tech 2 can communicate with these switches, the vehicle is equipped with door modules. If the Tech 2 cannot communicate with the door switches, the vehicle does not have door modules and the wiring between the driver and passenger mirrors is hard wired.

#### Swapping Mirrors on a Vehicle Equipped with Door Modules

**TIP:** Before any parts are installed, calibrations must be obtained and door switch modules and switch bezels must be reviewed and obtained if necessary. Do not attempt the mirror swap if calibrations and/or needed parts are not obtained.

Obtain new door module calibrations from the Techline Customer Support Center at 1-800-828-6860 (English) or 1-800-503-3222 (French). Provide the RPO of the mirrors being installed and request a new calibration for both door modules.

If switching from RPO DL3 to RPO DPN/DL8 or vice versa, a new driver's door switch module and switch trim bezel may need to be obtained. Review the latest version of PIT4417 for additional information about using original components or new components as well as the functionality of the new mirrors.

#### Swapping Mirrors on a Vehicle Not Equipped with Door Modules

This information only covers the Base Power Mirror (DL8) and Camper Mirror (DPN), both of which are not equipped with door modules. These two mirrors can be swapped without any additional hardware changes. The only thing to be aware of is that some vehicles equipped with the Base Power Mirror may not have the turn signal wiring, due to the mirror not being equipped with a turn signal indicator. If the Camper Mirrors are installed, the turn signal indicator may be inoperative unless the turn signal wiring is installed. Do not contact Partech for a wiring harness. The wires will have to be added.

S Thanks to Scott Fibranz

# Evaporative Emission Canister Purge Pipe Contact

2010-2012 LaCrosse models equipped with the 3.0L engine (RPO LF1) or 3.6L engine (RPO LLT) may have an illuminated Service Engine Soon MIL along with DTCP0442 (EVAP System Small Leak Detected).

Inspect the evaporative emission canister purge pipe for contact with the throttle body. If contact is present, replace the purge pipe and secure it to eliminate future contact. Clear any set DTCs.

**TIP:** The new evaporative emission canister purge pipe has conduit installed in the area of concern on the original pipe.

S Thanks to Christopher Crumb



Inspect for purge pipe contact with the throttle body.

## -0-0

#### Car Issues – Fix It Right the First Time

Model Year(s)	Vehicle Line(s)/Condition	Do This	Don't Do This	Reference Information/Bulletin
2013	Sonic — Unable to make a call using phone icon on radio	Reprogram the radio using the SPS with the latest calibrations available on TIS2Web.	Replace the radio.	PI0953
2012-2013	Sonic — Hatchback liftgate will not open using remote key fob and touchpad	New software update.	Replace BCM.	P10945
2012-2013	2-2013     Sonic — Engineering Information – Front compartment (underhood) fuse block replacement     Engineering phone call.     Replace UBEC.		PIE0252	
2013	ATS — Front brake squeal or squeak noise intermittently on initial brake applies	Apply grease as specified.	Replace brake pads or rotors.	Pl0917A
2013	$\mbox{ATS}$ — Driver or passenger power seatback recliner stuck and/or will not recline	Free the recliner following this procedure.	Replace the seat back frame.	PI0948A
2013	shutter malfunction shutter if DTCs P069E and P059F or P069E and U0284 are present. shutter lowe the shutter a remove the a		Grab or attempt to move the shutter louvers, disassemble the shutter assembly, or remove the actuator from the shutter assembly.	PIE0256
2011-2013	Trax, Sonic, Cruze, Encore — Diagnostic tips for front cover oil leak	Use oil dye to determine the leak location and repair as necessary.	Replace front timing chain cover for oil leak.	PI0957
2012-2013	Cruze — Pulsating/rotational noise from right rear of vehicle on brake apply	Replace right rear brake drum, shoes, and apply high temp grease.	Don't turn the drum.	PI0887B
2010-2014	LaCrosse, Verano, Sonic, Regal, Malibu, Impala, Cruze — Intermittent unwanted trunk opening while vehicle is parked	Install "2-Shot" trunk relay per PI.	Replace any other component.	PI0924



#### Truck Issues – Fix It Right the First Time

Model Year(s)	Vehicle Line(s)/Condition	Do This	Don't Do This	Reference Information/Bulletin
2011-2013	Captiva — Engine no crank/no start and/or inoperative HVAC control	Replace module with new part number known.	Use the old part number.	P10944A
2012-2013	Captiva — Engineering Information – Power rear door lock difficult to operate, binds	Call the Engineer prior to repair.	Repair car prior to calling the engineer.	PIE0244A
2012	Traverse, Acadia — Left rear side door molding loose at front edge, contacting rear edge of left front door or door side molding	Modify molding before installing.	Use the locator on the molding to align the molding.	P10947
2007-2014	Enclave, Acadia, Outlook — Diagnostic Tip – DIC switch buttons are inoperative	Remove battery power to the IPC after service is performed to either the DIC switch or the IPC for return of DIC function.	Replace multiple modules for DIC function to return.	PIT4534D
2013	Traverse, Acadia, Enclave — Diagnostic Tip – No communication with the right side blind zone module	Follow instructions for programming module.	Replace multiple modules because of inability to communicate.	PIT5211

Service Know-How

10213.08D Emerging Issues August 8, 2013

To view Emerging Issues seminars:

• Log in to www.centerlearning.com

- Select Resources, and then Video on Demand; or
   Select Catalog to search for the course number, and then
  - select View > Take or Continue Course

GM

Customer Care and Aftersales

Case 2:18-cv-14371-RLR Document 1-6 Entered on FLSD Docket 09/10/2018 Page 1 of 7

# **EXHIBIT 4**

5/2/2014 Case 2:18-cv-148-PATREMair 12010 Ghave Truck Equine AVEr Left on Entries DE Deside Abord 12010 Ghave Page 2 of 7

#### 2010 Chevy Truck Equinox AWD L4-2.4L

Vehicle » Technical Service Bulletins » All Technical Service Bulletins » Engine - Excessive, Abnormal Oil Consumption

#### # 13-06-01-003D: Excessive Oil Consumption - Perform Oil Consumption Test and/or Install Piston and Piston Ring Kit - (Sep 10, 2013)

Subject: Excessive Oil Consumption - Perform Oil Consumption Test and/or Install Piston and Piston Ring Kit

Models: 2010-2013 Buick LaCrosse2011-2013 Buick Regal 2010-2013 Chevrolet Equinox 2012-2013 Chevrolet Orlando (Canada Only) 2010-2013 GMC Terrain Equipped with 2.4L Engine (RPOs LAF, LEA)

This bulletin has been revised to add the Orlando model and update the Warranty Information. Please discard Corporate Bulletin Number 13-06-01-003C.

#### Condition

Some customers may comment on excessive oil consumption and/or that they have to add oil between oil changes.

#### Correction

For this condition, technicians should perform an oil consumption test by following the latest version of Corporate Bulletin Number 01-06-01-011. Before starting the oil consumption test, verify the ECM has latest TIS2web calibrations to adjust the engine oil life monitor to a maximum of 7,500 miles (12,070 km) - Refer to Customer Satisfaction Bulletin # 12312.

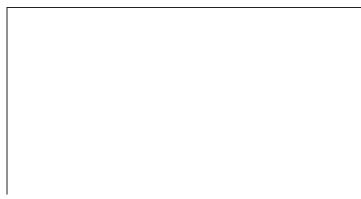
Inspect for any obvious oil leaks that may explain the oil consumption concern and repair as necessary.

#### Important:

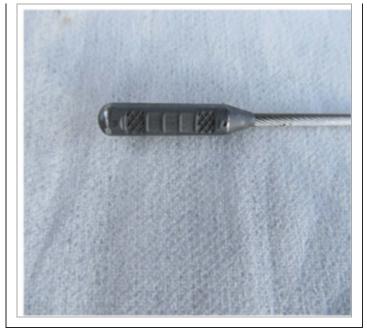
When checking the oil level with the oil dipstick design shown below, please note that the oil volume per notch is not linear due to the shape of the block. The upper notches (relative to the top of the handle) equal 0.24 quart (0.227 L) between each notch while the lower notches only equal 0.14 quart (0.132 L) between each notch. As a result, no oil will appear on the dipstick if it is low on oil by approximately 1.25 quarts (1.18 L) or more. When determining the oil consumption rate, the oil volume added to return it to the starting location is the total amount of oil consumed. The consumption rate must be documented on a repair order.

#### Notice:

Do not add too much oil. An overfill can lead to burn off of the excess oil. Advise the customer to wait until the oil is below the cross-hatched area at the tip of the dipstick before adding oil.



5/2/2014 Case 2:18-cv-149-74-TRR Mair 12010 GIMPNET THE EQUINER AND THE BOST AND TH



If the oil consumption test indicates that the rate of consumption is greater than 1 quart (0.946 L) of oil every 2,000 miles (3,200 km), note the oil consumption rate, the date that the ECM was reprogrammed and any repairs/diagnosis that you have performed.

The repair is to replace the pistons and rings. In some cases the bore surface may not have a uniform look to the finish (zebra stripes) as shown below. As a result, some technicians may question whether the engine should be repaired or replaced. After careful evaluation, GM Powertrain has determined that the new pistons and rings will perform correctly in bores that have this appearance so engine replacement should not be necessary. The cylinder bores do not need any machine or honing work performed on them. Refer to the picture below for acceptable surface finishes.

#### Important:

DO NOT use any abrasive wheels/ materials to clean any mating surfaces. Only Plastic scrapers should be used. Please refer to the latest version of Corporate Bulletin Number 00-06-01-012.

#### Acceptable Cylinder that Does Not Appear Uniform (Zebra Stripes)



While performing this repair on 2010 and 2011 vehicles built before March of 2011, it should be verified that the high pressure fuel pump (P/N 12641847), balance chain (P/N 12645237), balance chain tensioner (P/N 12649233), and timing chain kit (P/N 12635447) have been installed in this engine in a previous repair. Refer to IVH and check the parts listed in the prior repairs. If these parts have not been installed, they should be replaced at the time that the piston and rings are replaced. If they have been replaced, do not replace them again. Engines in 2012 and 2013 vehicles do not need the balance chain or fuel pump inspected.

Also when performing this repair, several other parts should be inspected for excessive wear and/or damage and replaced if necessary:

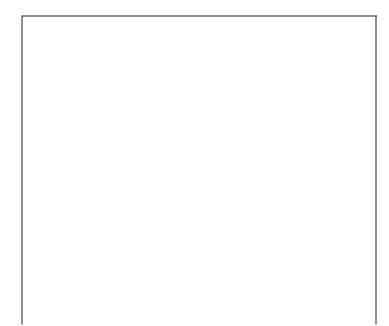
- Balance chain guides
- Timing chain guides

#### Important:

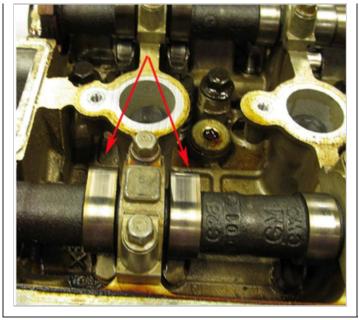
DO NOT use any abrasive wheels/ materials to clean any mating surfaces. Only Plastic scrapers should be used. Please refer to the latest version of Corporate Bulletin Number 00-06-01-012.

#### Note:

Returned oil consumption engines have been reviewed at engine tear down. It has been determined that these components do not need to be replaced:



5/2/2014 Case 2:18-cv-149-PATRE Rair 12010 Ghave Truck Equine AVER Let 4n Entrie DE Designer Abord 12010 Mar De 15 of 7



<sup>^</sup>Camshafts and roller follower will have wear markings. This is normal and do not need to be replaced (refer to picture above).



<sup>^</sup>Valves stems may have deposits build up on them. These deposits are characteristic of a direct inject engine. The valves stems do not need to be cleaned as they are not affecting engine performance (Refer to picture above).

<sup>^</sup>The oil pump does not need to be replaced as the low oil level operation did not damage the pump.

<sup>^</sup>The camshaft actuators do not need to be replaced at this time. The vehicle may have arrived with the engine knocking. If the oil level was 1-1/2 - 2 quarts low, it was the lack of oil causing the actuator noise.

^Rod bearings can be reused if there is not any excessive scoring, some light wear marks are acceptable

#### Important:

Rod bearings must be marked to identify the proper location to ensure bearings are returned to their

5/2/2014 Case 2:18-cv-1482747REmain 2010 Ghave Truck Equine AWEN Left the Patience Decestive About 19/2019 Manage 6 of 7

original positions.

The final step is to verify that ECM OLM calibration has been installed before the vehicle is returned to the customer.

#### Important:

DO NOT use any abrasive wheels/materials to clean any mating surfaces. Only Plastic scrapers should be used. Please refer to the latest version of Corporate Bulletin Number 00-06-01-012.

Part Number	Description
12646457	PISTON KIT, ENG
12659419	RING KIT, PSTN
12637166	GASKET KIT, CYL HD
12609291	SEAL, CM/SHF

Parts Information

Labor Operation	Description	
4080008*	Oil Consumption Test Setup	0.2 hr
4080178*	Piston, Connecting Rod and Bearing Replacement (Includes Oil Consumption Test)	9.5 hrs
Add	To Replace Fuel Pump (2010-2011 Models Built Prior to March 2011 Only)	0.7 hr
Add	To Replace Balance Shaft Chain and Tensioner (2010- 2011 Models Built Prior to March 2011 Only)	0.8 hr
Add	To Replace Timing Chain (2010-2011 Models Built Prior to March 2011 Only)	0.5 hr
*This is a unique labor operation for bulletin use only. It will not be published in the Labor Time Guide.		

5/2/2014 Case 2:18-cv-148-PATRE Rair 2000 Cheve Truck Equine AVEr Let 4n Entries DE Deside Abord 10/2012 Manapage 7 of 7

#### Warranty Information

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, tooks, 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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Disclaimer

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# EXHIBIT 5

Case 2:18-cv-14371-RLR Document 1-7 Entered on FLSD Docket 09/10/2018 Page 2 of 4



Service Bulletin

File in Section: 06 - Engine Bulletin No.: 13-06-01-003F Date: May, 2014

# TECHNICAL

- Subject: Excessive Oil Consumption Perform Oil Consumption Test and/or Install Piston and Piston Ring Kit
- Models: 2010-2013 Buick LaCrosse 2011-2013 Buick Regal 2012-2013 Buick Verano 2010-2013 Chevrolet Equinox 2012-2013 Chevrolet Captiva, Orlando (Canada Only) 2010-2013 GMC Terrain Equipped with 2.4L Engine (RPOs LAF, LEA)

This bulletin has been revised to update the Parts Information. Please discard Corporate Bulletin Number 13-06-01-003E.

## Condition

Some customers may comment on excessive oil consumption and/or that they have to add oil between oil changes.

## Correction

For this condition, technicians should perform an oil consumption test by following the latest version of Corporate Bulletin Number 01-06-01-011. Before starting the oil consumption test, verify the ECM has latest TIS2web calibrations to adjust the engine oil life monitor to a maximum of 7,500 miles (12,070 km) — Refer to the latest version of Customer Satisfaction Bulletin #12312.

Inspect for any obvious oil leaks that may explain the oil consumption concern and repair as necessary.

**Important:** When checking the oil level with the oil dipstick design shown below, please note that the oil volume per notch is not linear due to the shape of the block. The upper notches (relative to the top of the handle) equal 0.24 quart (0.227 L) between each notch while the lower notches only equal 0.14 quart (0.132 L) between each notch. As a result, no oil will appear on the dipstick if it is low on oil by approximately 1.25 quarts (1.18 L) or more. When determining the oil consumption rate, the oil volume added to return it to the starting location is the total amount of oil consumed. The consumption rate must be documented on a repair order.

**Notice:** Do not add too much oil. An overfill can lead to burn off of the excess oil. Advise the customer to wait until the oil is below the cross-hatched area at the tip of the dipstick before adding oil.



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If the oil consumption test indicates that the rate of consumption is greater than 1 quart (0.946 L) of oil every 2,000 miles (3,200 km), note the oil consumption rate, the date that the ECM was reprogrammed and any repairs/diagnosis that you have performed.

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The repair is to replace the pistons and rings. In some cases the bore surface may not have a uniform look to the finish (zebra stripes) as shown below. As a result, some technicians may question whether the engine should be repaired or replaced. After careful evaluation, GM Powertrain has determined that the new pistons and rings will perform correctly in bores that have this appearance so engine replacement should not be necessary. The cylinder bores do not need any machine or honing work performed on them. Refer to the picture below for acceptable surface finishes.

**Note:** Use Piston Ring Compressor EN-47836 when installing rings.

**Important:** DO NOT use any abrasive wheels/ materials to clean any mating surfaces. Only Plastic scrapers should be used. Please refer to the latest version of Corporate Bulletin Number 00-06-01-012.

Acceptable Cylinder that Does Not Appear Uniform (Zebra Stripes)

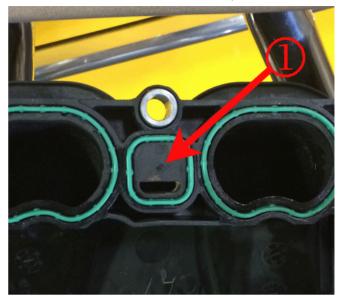


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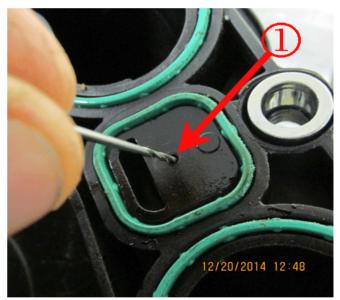
While performing this repair on 2010 and 2011 vehicles built before March of 2011, it should be verified that the high pressure fuel pump (P/N 12641847), balance chain (P/N 12645237), balance chain tensioner (P/N 12649233), and timing chain kit (P/N 12635447) have been installed in this engine in a previous repair. Refer to IVH and check the parts listed in the prior repairs. If these parts have not been installed, they should be replaced at the time that the piston and rings are replaced. If they have been replaced, do not replace them again. Engines in 2012 and 2013 vehicles do not need the balance chain or fuel pump inspected.

The oil consumption may have clogged/ reduced PCV flow. The PCV system should be serviced.

Clean any ice/sludge/water/carbon out of the PCV pipes/hoses, the PCV nipple on the cam cover, the PCV orifice between the #2 and #3 intake runners (use a 1/16 inch drill bit as illustrated below).



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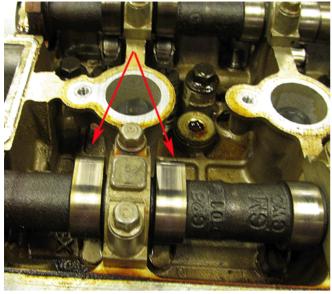
#### Legend

(1) PCV orifice in the intake manifold

Also when performing this repair, several other parts should be inspected for excessive wear and/or damage and replaced if necessary:

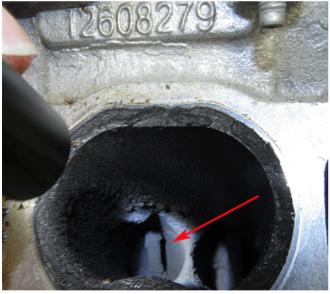
- Balance chain guides
- Timing chain guides

**Important:** DO NOT use any abrasive wheels/ materials to clean any mating surfaces. Only Plastic scrapers should be used. Please refer to the latest version of Corporate Bulletin Number 00-06-01-012. **Note:** Returned oil consumption engines have been reviewed at engine tear down. It has been determined that these components do not need to be replaced:



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• Camshafts and roller follower will have wear markings. This is normal and do not need to be replaced (refer to picture above).



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 Valves stems may have deposits build up on them. These deposits are characteristic of a direct inject engine. The valves stems do not need to be cleaned as they are not affecting engine performance (Refer to picture above).

- The oil pump does not need to be replaced as the low oil level operation did not damage the pump.
- The camshaft actuators do not need to be replaced at this time. The vehicle may have arrived with the engine knocking. If the oil level was 1 1/2 - 2 quarts low, it was the lack of oil causing the actuator noise.
- Rod bearings can be reused if there is not any excessive scoring. Some light wear marks are acceptable.

**Important:** Rod bearings must be marked to identify the proper location to ensure bearings are returned to their original positions.

The final step is to verify that ECM OLM calibration has been installed before the vehicle is returned to the customer.

**Important:** DO NOT use any abrasive wheels/ materials to clean any mating surfaces. Only Plastic scrapers should be used. Please refer to the latest version of Corporate Bulletin Number 00-06-01-012.

#### **Parts Information**

Part Number	Description
19303450	PISTON AND RING KIT, ENG (Set of 4)
12637166	GASKET KIT, CYL HD
12609291	SEAL, CM/SHF

## **Warranty Information**

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
4080008*	Oil Consumption Test Setup	0.2 hr
4080178*	Piston, Connecting Rod and Bearing Replacement (Includes Oil Consumption Test)	9.5 hrs
Add	To Replace Fuel Pump (2010- 2011 Models Built Prior to March 2011 Only)	0.7 hr
Add	To Replace Balance Shaft Chain and Tensioner (2010-2011 Models Built Prior to March 2011 Only)	0.8 hr
Add	To Replace Timing Chain (2010- 2011 Models Built Prior to March 2011 Only)	0.5 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.



WE SUPPORT VOLUNTARY TECHNICIAN CERTIFICATION Case 2:18-cv-14371-RLR Document 1-8 Entered on FLSD Docket 09/10/2018 Page 1 of 8

# EXHIBIT 6



Service Bulletin

Bulletin No.: 15285 Date: July 2015

# **SPECIAL COVERAGE**

SUBJECT: Special Coverage Adjustment - Excessive Engine Oil Consumption

### MODELS: 2011 Chevrolet Equinox 2011 GMC Terrain Equipped with 2.4L Engine (LAF)

#### CONDITION

Some 2011 model year Chevrolet Equinox and GMC Terrain vehicles, equipped with a 2.4L engine, may exhibit excessive engine oil consumption (less than 2,000 miles per quart of engine oil), due to piston ring wear. If this condition is present, the oil can light may illuminate on the instrument panel or the following message may appear in the Driver Information Center: "Oil Pressure Low – Stop Engine".

#### SPECIAL COVERAGE ADJUSTMENT

This special coverage covers the condition described above for a period of 7 years and 6 months or 120,000 miles (193,000 km), whichever occurs first, from the date the vehicle was originally placed in service, regardless of ownership.

Dealers are to replace the 4 piston assemblies. The repairs will be made at no charge to the customer.

For vehicles covered by Vehicle Service Contracts, all eligible claims with repair orders on or after July 21, 2015, are covered by this special coverage and must be submitted using the labor operation codes provided with this bulletin. Claims with repair orders prior to July 21, 2015, must be submitted to the Service Contract provider.

#### VEHICLES INVOLVED

All involved vehicles are identified by Vehicle Identification Number on the Applicable Warranties section in GM Global Warranty Management system. Dealership service personnel 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.

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#### PART INFORMATION

Parts required to complete this special coverage are to be obtained from General Motors Customer Care and Aftersales (GMCC&A).

Part Number	Description	Quantity/Vehicle
19303450	Piston Kit	1
12637166	Gasket Kit, Cylinder Head	1
12609291	Gasket Kit, Camshaft Cover	1
12635447	Seal, Chain Package, Timing	1
12635427	Chain Assembly, W/Pmp And Balr Shf	1
12649233	Tensioner Asm - W/Pmp & Balr Shf Chain	1
24435052	Gasket, Engine Front Cover	1
12602379	Seal, Fuel Pump Housing (Oring)	1
12608374	Pipe Asm, Fuel Feed Inter	1
12584041	Seal, Cr/Shf Front Oil	1
11589123	Bolt Asm, Hx Hd W/Con Spr Washer	1
11588844	Bolt, Cm/Shf Posn Actr	2
12605566	Filter, Oil	1
19293000	Oil, Engine, AC Delco DEXOS1 5W30	5
90537293	Screw Schraube (Connecting Rod)	8
88864346	Sealant, RTV	2
90537336	Guide, Balr Chain	1
12346290	Coolant, Engine, Dexcool Antifreeze	1

#### SERVICE PROCEDURE

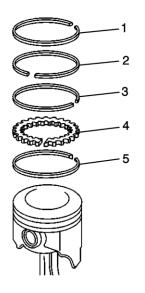
**Note:** This special policy covers repairs after the original powertrain warranty has expired. For vehicles still covered under the original powertrain warranty, the labor code operations should be used from bulletin 13-06-01-003.

**Note:** Technicians should perform an oil consumption test to determine if the pistons and rings must be replaced. Follow the latest version of Corporate Bulletin Number 01-06-01-011 to perform an oil consumption test. Before starting the oil consumption test, verify the ECM has latest TIS2web calibrations to adjust the engine oil life monitor to a maximum of 7,500 miles (12,070 km) — Refer to the latest version of Customer Satisfaction Bulletin number 12312.

- 1. Determine the rate of oil consumption.
- If the oil consumption test indicates that the rate of consumption is less than 1 quart (0.946L) of oil every 2,000 miles (3,200 km), note the oil consumption rate and the date that the ECM was reprogrammed. No further action is required.
- If the oil consumption test indicates that the rate of consumption is greater than 1 quart (0.946 L) of oil every 2,000 miles (3,200 km), note the oil consumption rate, the date that the ECM was reprogrammed and replace the pistons and rings.

**Note:** The repair is to replace the pistons and rings. In some cases the bore surface may not have a uniform look to the finish (zebra stripes) as shown in Technical Service Bulletin 13-06-01-003F. As a result, some technicians may question whether the engine should be repaired or replaced. After careful evaluation, GM Powertrain has determined that the new pistons and rings will perform correctly in bores that have this appearance so engine replacement should not be necessary. The cylinder bores do not need any machine or honing work performed on them. Refer to Technical Service Bulletin 13-06-01-003F for more information.

## **Piston and Ring Replacement Procedure**



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Note: Review the following service procedures and technical bulletin in SI:

- Engine Replacement
- Technical Service Bulletin 13-06-01-003F
- Piston and Connecting Rod Disassemble
- Piston and Connecting Rod Assemble
- Piston, Connecting Rod, and Bearing Installation (LAF, LAT, LE5, LE9, LEA, or LUK)
- 1. Remove the engine from the vehicle.
- 2. Remove the pistons from the engine.
- 3. Remove the pistons from the connecting rods.
- 4. Discard the pistons and piston rings.
- 5. Install the new piston rings onto the new pistons.
- 6. Install the new pistons onto the connecting rods.
- 7. Assemble the engine.
- 8. Install the engine into the vehicle.

# CUSTOMER REIMBURSEMENT - For US

Customer requests for reimbursement of previously paid repairs to correct the condition described in this bulletin are to be submitted to the dealer by August 31, 2016, unless otherwise specified by state law. If this is not convenient for the customer, they may mail the completed Customer Reimbursement Request Form and all required documents to the GM Customer Assistance Center.

Repairs must have occurred within the 7 years and 6 months of the date the vehicle was originally placed in service, or 120,000 miles, whichever occurs first.

#### All reasonable and customary costs to correct the condition described in this bulletin should be considered for reimbursement. Any questions or concerns should be reviewed with your GM representative prior to processing the request.

When a customer requests reimbursement, they must provide the following:

- A completed Customer Reimbursement Request Form. This form is mailed to the customer or can be obtained through GM GlobalConnect.
- The name and address of the person who paid for the repair.
- Paid receipt confirming the amount of the repair expense, a description of the repair, and the person or entity performing the repair.

**IMPORTANT:** GM requires dealers to approve or deny a reimbursement request within 30 days of receipt. If a reimbursement request is approved, the dealer should immediately issue a check to the customer and submit an appropriate warranty transaction for the incurred expense. If a reimbursement request is denied, the dealer <u>MUST</u> provide the customer with a clear and concise explanation, in writing, as to why the request was denied. The bottom portion of the Customer Reimbursement Request Form may be used for this purpose. If the denial was due to missing documents, the customer can resubmit the request when the missing documents are obtained, as long as it is still within the allowed reimbursement period.

Warranty transactions for customer reimbursement of previously paid repairs are to be submitted as required by GM Global Warranty Management. Additional information can also be found in Warranty Administration Bulletin 11-00-89-004.

## CUSTOMER REIMBURSEMENT - For Canada and Export

Customer requests for reimbursement of previously paid repairs to correct the condition described in this bulletin are to be submitted to the dealer prior to or by August 31, 2016. Repairs must have occurred within the 7 years and 6 months of the date the vehicle was originally placed in service, or 193,000 kilometers, whichever occurs first.

When a customer requests reimbursement, they must provide the following:

- Proof of ownership at time of repair.
- Original paid receipt confirming the amount of unreimbursed repair expense(s) (including Service Contract deductibles), a description of the repair, and the person or entity performing the repair.

All reasonable and customary costs to correct the condition described in this bulletin should be considered for reimbursement. Any questions or concerns should be reviewed with your GM representative prior to processing the request.

## 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

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should refer to the General Motors Service Policies and Procedures Manual for Courtesy Transportation guidelines.

#### WARRANTY TRANSACTION INFORMATION

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

- **Note:** This special policy covers repairs after the original powertrain warranty has expired. For vehicles still covered under the original powertrain warranty, the labor code operations should be used from bulletin 13-06-01-003 as shown below.
- **Note:** To avoid having to "H" route the customer reimbursement transaction for approval, it must be submitted prior to the repair transaction.

For Use With Vehicles <u>Still Covered</u> Under Applicable New Vehicle Limited Warranties			
Labor Code	Description	Labor Time	Net Item
4080008	Oil Consumption Test Setup – No Repair Required	0.2	N/A
4080178	Piston, Connecting Rod and Bearing Replacement (Includes Oil Consumption Test)	10.4	*

# **Note:** For reimbursements on vehicles covered under warranty, refer to the Policies and Procedures Manual.

For Use With Vehicles <u>No Longer Covered</u> Under Applicable New Vehicle Limited Warranties			
Labor Code	Description	Labor Time	Net Item
9900183	Oil Consumption Test Setup – No Repair Required	0.2	N/A
9900184	Piston and Piston Ring Replacement (Includes Oil Consumption Test		N/A
9900185	Customer Reimbursement Approved	0.2	*
9900186	Customer Reimbursement Denied - For US dealers only	0.1	N/A

\* The amount identified in "Net Item" should represent the dollar amount reimbursed to the customer.

#### CUSTOMER NOTIFICATION

General Motors will notify customers of this special coverage on their vehicles (see copy of typical customer letter included with this bulletin - actual divisional letter may vary slightly).



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August 2015

This notice applies to your vehicle, VIN: \_\_\_\_\_

Dear General Motors Customer:

As the owner of a 2011 model year Chevrolet Equinox or GMC Terrain, your satisfaction with our product is very important to us.

This letter is intended to make you aware that some 2011 model year Chevrolet Equinox and GMC Terrain vehicles, equipped with a 2.4L engine, may exhibit excessive engine oil consumption (less than 2,000 miles per quart of engine oil), due to piston ring wear. Check your oil level periodically. Also, if this condition is present, the oil can light may illuminate on your instrument panel or you may have the following message in the Driver Information Center: "Oil Pressure Low – Stop Engine". See your owner manual for additional information on what to do if the vehicle displays this message.

# Do not take your vehicle to your GM dealer as a result of this letter unless you believe that your vehicle has the condition as described above.

What We Have Done: General Motors is providing owners with additional protection for the condition described above. If this condition occurs on your 2011 model year Chevrolet Equinox or GMC Terrain within 7 years and 6 months of the date your vehicle was originally placed in service or 120,000 miles (193,000 km), whichever occurs first, the condition will be repaired for you at **no charge**. Diagnosis or repair for conditions other than the condition described above is not covered under this special coverage program.

What You Should Do: Be sure to maintain proper engine oil level at all times and have the oil changed when the CHANGE ENGINE OIL SOON message appears on the Driver Information Center. If you believe that your vehicle has the condition described above, repairs and adjustments qualifying under this special coverage must be performed by a General Motors dealer. You may want to contact your GM dealer to find out how long they will need to have your vehicle so that you may schedule the appointment at a time that is convenient for you. This will also allow your dealer to order parts if they are not already in stock. Keep this letter with your other important glove box literature for future reference.

**Reimbursement:** If you have paid for repairs for the condition described in this letter, please complete the enclosed reimbursement form and present it to your dealer with all required documents. Working with your dealer will expedite your request, however, if this is not convenient, you may mail the completed reimbursement form and all required documents to Reimbursement Department, PO Box 33170, Detroit, MI 48232-5170. The completed form and required documents must be presented to your dealer or received by the Reimbursement Department by August 31, 2016, unless state law specifies a longer reimbursement period.

If you have any questions or need any assistance, just contact your dealer or the appropriate Customer Assistance Center at the number listed below.

Division	Number	Text Telephones (TTY)
Chevrolet	1-800-222-1020	1-800-833-2438
GMC	1-800-462-8782	1-888-889-2438
Guam	65-6267-1752	
Puerto Rico – English	1-800-496-9992	
Puerto Rico – Español	1-800-496-9993	
Virgin Islands	1-800-496-9994	

We are sorry for any inconvenience you may experience; however, we have taken this action in the interest of your continued satisfaction with our products.

Alicia S. Boler-Davis Sr. Vice President Global Connected Customer Experience

Enclosure 15285