Customer Satisfaction Program
17019 Stochastic Pre-Ignition (SPI) Causing Cracked Piston

Reference Number: N162071350

Release Date: March 2017
Revision: 01

Revision Description: This bulletin is being revised to add the customer letter, owner manual insert page and to revise the warranty information section. Please discard all previous copies of bulletin 17019.

Attention: **This program is in effect until February 28, 2019. Please note the engine oil requirement outlined in this bulletin becomes the new standard going forward for the LFV 1.5L engine. Customers will be informed through direct mailing of this change, as well as the Service Information and Owner Manual being updated to reflect this revised requirement.**

Make	Model	Model Year		RPO	Description
		From	To		
Chevrolet	Malibu	2016	2017	LFV	1.5L Engine

Involved vehicles are marked "open" on the Investigate Vehicle History screen in the GM Global Warranty Management system. This site should always be checked to confirm vehicle involvement prior to beginning any required inspections and/or repairs. It should also be checked prior to vehicle delivery and at every vehicle service visit.

Condition	Certain 2016 and 2017 model year Chevrolet Malibu vehicles equipped with a 1.5L LFV engine may have a pre-ignition condition that could cause piston damage. If this condition occurs, the vehicle may perform poorly and oil consumption could increase. In addition, a service engine light may illuminate indicating an engine misfire. If the condition is present, and the repair below is not completed before multiple pre-ignition events occur, a piston may be damaged and the engine may need to be repaired or replaced.
Correction	Reprogram the Engine Control Module (ECM) and change the engine oil with ACDelco dexos 1 Full-Synthetic motor oil **of the part number as indicated in the parts section**. (In Canada use the exact Mobil 1 part number specified in the parts section). It is very important that only oil with the correct part number is used in this repair.

Parts

Caution: The part numbers below are **required** when performing the oil change. Do NOT use any other engine oil for this repair.

Note: Choose one of the engine oil part numbers below.

Quantity	Part Name	Part No.
5	Engine Oil (5W-30) (DEXOS1) (Quart)	88865635 (US)
Use Specified Amount	Engine Oil (5W-30) (DEXOS1) (55 Gallon)	88865636 (US)
Use Specified Amount	Engine Oil (5W-30) (DEXOS1) (55 Gallon)	88865637 (US)
Use Specified Amount	Engine Oil (5W-30) (DEXOS1) (Bulk)	88865638 (US)
Use Specified Amount	Engine Oil (5W-30) (DEXOS1) (Bulk)	88865639 (US)
Use Specified Amount	Engine Oil (5W-30) (DEXOS1) (Bulk)	88865640 (US)
Use Specified Amount	Engine Oil (5W-30) (DEXOS1) (Bulk)	88865641 (US)
Use Specified Amount	Engine Oil (5W-30) (DEXOS1) (Bulk)	88865642 (US)

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Use Specified Amount	Engine Oil (5W-30) (DEXOS1) (Bulk)	88865643 (US)
Use Specified Amount	Engine Oil (5W-30) (DEXOS1) (Bulk)	88865644 (US)
Use Specified Amount	Engine Oil (5W-30) (DEXOS1) (Bulk)	88865645 (US)
Use Specified Amount	Engine Oil (5W-30) (DEXOS1) (Bulk)	88865646 (US)
Use Specified Amount	Engine Oil (5W-30) (DEXOS1) (Bulk)	88865647 (US)
4	Mobil 1 5W-30 (Liter)	10953468 (Canada)
1	Engine Oil Filter	12640445

Warranty Information

Labor Operation	Description	Labor Time	Trans. Type	Net Item
9102962	Inspect Engine Control Module (ECM) Calibrations and Oil Change	0.4	ZFAT	N/A
9102963	Engine Control Module Reprogramming with SPS and Oil Change (Includes Inspect ECM Calibrations)	0.5	ZFAT	N/A

Note: Both the oil and filter part numbers should be submitted in the Parts field of the transaction. If bulk oil was used, the dealer must submit the appropriate bulk part number. In the quantity field for bulk oil, list the number of quarts used. Global Warranty Management will calculate the appropriate amount at a per quart price. No amount should be entered in Net.

Part retention requirements on oil filters replaced as part of the service procedure listed in Bulletin 17019 is waived. Dealers can immediately scrap oil filters removed from vehicles after completing this field action.

As a reminder, Article 4.2 of the Service Policies and Procedures Manual states that fluids are not required to be retained by dealers, therefore oil drained during this procedures can be immediately properly disposed of.

Any other parts replaced in relation to this bulletin must be tagged and retained in accordance with Service Policies and Procedures.

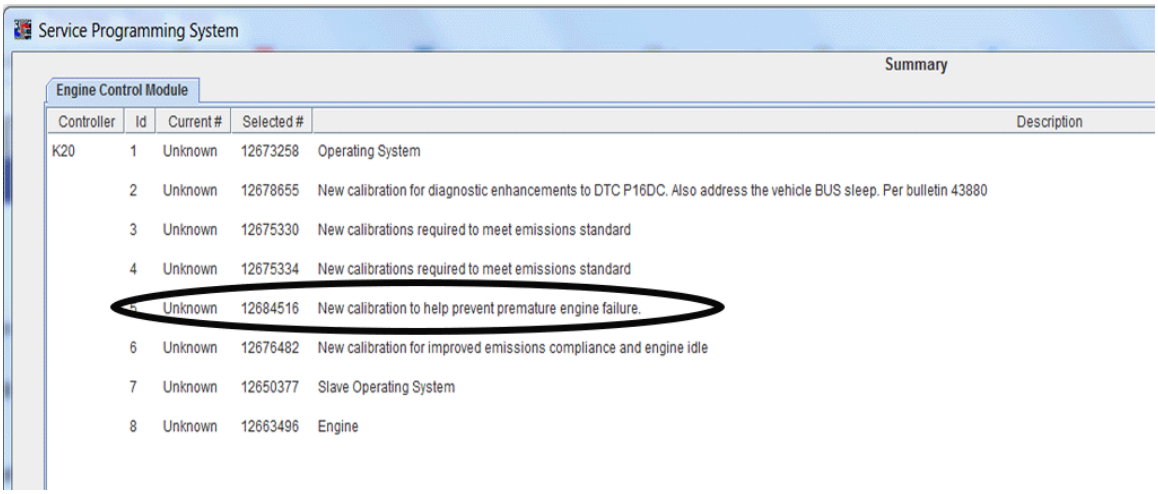
Service Procedure

Note: Carefully read and follow the instructions below.

- Do NOT attempt to order the calibration numbers from GM Customer Care and Aftersales. The calibration numbers required for this service procedure are programmed into control modules via a Multiple Diagnostic Interface (MDI) with the calibration update. If you cannot access the calibration, call the Techline Customer Support Center and it will be provided.
- Do NOT program a control module unless directed to by a service procedure or a service bulletin. If the control module is not properly configured with the correct calibration software, the control module will not control all of the vehicle features properly.
- Ensure the programming tool is equipped with the latest software and is securely connected to the data link connector (DLC). If there is an interruption during programming, programming failure or control module damage may occur.
- Stable battery voltage is critical during programming. Any fluctuation, spiking, over voltage or loss of voltage will interrupt programming. When required, install the *EL-49642* SPS Programming Support Tool to maintain system voltage. If not available, connect a fully charged 12 V jumper or booster pack disconnected from the AC voltage supply. DO NOT connect a battery charger.
- Turn OFF or disable systems that may put a load on the vehicles battery such as; interior lights, exterior lights (including daytime running lights), HVAC, radio, etc.

- During the programming procedure, follow the Service Programming System (SPS) prompts for the correct ignition switch position.
- Clear Diagnostic Trouble Codes (DTCs) after programming is complete. Clearing powertrain DTCs will set the Inspection/Maintenance (I/M) system status indicators to NO.
- Note the engine oil life remaining percentage.

1. Install *EL-49642* SPS programming support tool.
2. Access the Service Programming System (SPS) and follow the on-screen instructions.
3. Select K20 Engine Control Module – Programming and follow on-screen instructions.



Controller	Id	Current #	Selected #	Description
K20	1	Unknown	12673258	Operating System
	2	Unknown	12678655	New calibration for diagnostic enhancements to DTC P16DC. Also address the vehicle BUS sleep. Per bulletin 43880
	3	Unknown	12675330	New calibrations required to meet emissions standard
	4	Unknown	12675334	New calibrations required to meet emissions standard
	5	Unknown	12684516	New calibration to help prevent premature engine failure.
	6	Unknown	12676482	New calibration for improved emissions compliance and engine idle
	7	Unknown	12650377	Slave Operating System
	8	Unknown	12663496	Engine

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4. On the Summary screen, inspect for Current and Selected calibration part numbers in the ID 5 Current column as shown.
   - If the Current and Selected values do NOT match then continue with K20 Engine Control Module Programming and Setup.
   - If the Current and Selected values match, the K20 Engine Control Module has already been updated. Proceed to step 8.
5. Clear DTCs after completing the Programming procedure.

Note: If vehicle fails to start during Configuration and Setup, perform the SPS Function Immobilizer Learn (Engine Control Module IMMO Learn) and follow the on-screen instructions.

6. Select K20 Engine Control Module – Setup and follow on-screen instructions.
7. Clear DTCs after completing the Setup procedure.

Caution: One of the GM engine oil part numbers listed in the parts table (or Mobil 1 5W-30 10953468 in Canada) is required when performing the oil change. Do NOT use any other engine oil as an equivalent for this repair.

Caution: Fill engine oil to 4 liters (4.2 quarts). Overfilling the engine oil may result in part damage.

8. Perform an oil change. Refer to *Engine Oil and Oil Filter Replacement* in SI.

Dealer Responsibility

All new, used, GM Certified Used, courtesy transportation, dealer shuttle, or other vehicles in dealers' possession and subject to this program must be held and inspected/repaired per the service procedure of this bulletin before customers take possession of these vehicles. Involved vehicles must be held and not delivered to customers, dealer-traded, released to auction, or used for demonstration or any other purpose until the repair has been successfully completed.

All GM Certified Used vehicles currently in the dealers' inventory within the Certified Pre-Owned Inventory System (CPOIS) will be de-certified and must be held and remedied per the service procedure in this bulletin prior to re-certification or delivery. Upon submitting an accepted/paid warranty transaction in the Global Warranty Management (GWM) system, the vehicle can be re-certified for sale within the CPOIS system and once again offered under the CTP program.

Dealers are to service all vehicles subject to this program at no charge to customers, regardless of mileage, age of vehicle, or ownership, through February 28, 2019. **Please immediately contact all customers who have recently purchased or leased affected vehicles from your vehicle inventory**, and for which there is no customer information indicated on the involved vehicle listing, are to be contacted by the dealer. Arrangements are to be made to make the required correction according to the instructions contained in this bulletin. Program follow-up cards should not be used for this purpose, since the customer may not have received any notification letter.

In summary, whenever a vehicle subject to this program enters your vehicle inventory, or is in your facility for service, through February 28, 2019, you must take the steps necessary to be sure the program correction has been made before selling or releasing the vehicle, or returning it to the customer.

Dealer Reports

For dealers with involved vehicles, a listing of impacted vehicles has been prepared and will be provided to U.S. and Canadian dealers through the GM GlobalConnect Recall Reports, or sent directly to export dealers. The listing may contain customer names and addresses obtained from Motor Vehicle Registration Records. The use of such motor vehicle registration data for any purpose other than follow-up necessary to complete this program is a violation of law in several states/provinces/countries. Accordingly, you must limit the use of this report to the follow-up necessary to complete this program.

Courtesy Transportation – For USA & Canada

Courtesy transportation is available for customers whose vehicles are involved in a product program and still within the warranty coverage period. See General Motors Service Policies and Procedures Manual, Sections 1.4 and 6.1.10, for courtesy transportation program details.

Customer Notification

USA & Canada - General Motors will notify customers of this program on their vehicle.

Export - Letters will be sent to known owners of record located within areas covered by the US National Traffic and Motor Vehicle Safety Act.

Customer Satisfaction Program

17019 Stochastic Pre-Ignition (SPI) Causing Cracked Piston

March 2017

This notice applies to your vehicle, **VIN:** _____

Dear General Motors Customer:

We have learned that your 2016 or 2017 model year Chevrolet Malibu may have a condition that could cause your engine to perform poorly and oil consumption to increase. In addition, a service engine light may illuminate indicating an engine misfire. If the condition is present, and the engine is not repaired immediately, a piston may become damaged, and the engine may need to be repaired or replaced.

Your satisfaction with your Malibu is very important to us, so we are announcing a program to prevent this condition or, if it has occurred, to fix it.

What We Will Do: Your GM dealer will reprogram the Engine Control Module (ECM) and change the engine oil. This service will be performed for you at **no charge until March 31, 2019**. After that, any applicable warranty will apply.

What You Should Do: To limit any possible inconvenience, we recommend that you contact your dealer as soon as possible to schedule an appointment for this repair. By scheduling an appointment, your dealer can ensure that the necessary parts will be available on your scheduled appointment date.

Enclosed with this letter please find an owner manual supplement which updates the engine oil requirements for your vehicle. Please keep this insert with your important vehicle documents for reference.

Important: In the future, when replacing the engine oil for the 1.5L L4 turbo engine, GM strongly recommends dexos 1™ approved ACDelco Full Synthetic 5W-30, Mobil 1 Full Synthetic 5W-30, or any other oil meeting dexos 1™ second generation requirements.

If you have any questions or concerns that your dealer is unable to resolve, please contact the appropriate Customer Assistance Center at the number listed below.

Division	Number	Text Telephones (TTY)
Chevrolet	1-800-222-1020	1-800-833-2438
Puerto Rico – English	1-800-496-9992	
Puerto Rico – Español	1-800-496-9993	
Virgin Islands	1-800-496-9994	

We sincerely regret any inconvenience or concern that this situation may cause you. We want you to know that we will do our best, throughout your ownership experience, to ensure that your Chevrolet vehicle provides you many miles of enjoyable driving.

Terry M. Inch
Executive Director
Global Connected Customer Experience

Enclosure
17019

Insert to the 2016 and 2017 Chevrolet Malibu Owner's Manual

This information replaces the information under "Engine Oil" found in the Vehicle Care section of the owner's manual and "Recommended Fluids, Lubricants, and Parts" found in the Service and Maintenance section of the owner's manual.

When replacing the engine oil for the 1.5L L4 turbo engine, GM strongly recommends dexos 1™ approved ACDelco Full Synthetic 5W-30, Mobil 1 Full Synthetic 5W-30, or any other oil meeting dexos 1™ second generation requirements.

Caution

Do not use any other engine oil than what is recommended. Always use the recommended engine oil and viscosity grade (e.g. 5W-30) or engine damage may occur.

Litho in U.S.A.
Part No. 84326024

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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 tools, equipment, 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 dealer for information on whether your vehicle may benefit from the information.

We Support Voluntary Technician Certification

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Date: March 1, 2017

Subject: 17019 01 – Customer Satisfaction Program
Stochastic Pre-Ignition (SPI) Causing Cracked Piston
Revised Warranty Information and Customer Letter Added

Models: 2016-2017 Chevrolet Malibu
Equipped with 1.5L Engine (RPO LFV)

To: All General Motors Dealers

This bulletin is being revised to add the customer letter, owner manual insert page and to revise the warranty information section. Please discard all previous copies of bulletin 17019.

Customer Letter Mailing
The customer letter mailing will begin on March 2, 2017.

END OF MESSAGE
GLOBAL SAFETY FIELD INVESTIGATIONS