

Product Emission Recall

17089 NOx Position 1 Sensor Replacement



Reference Number: N151645630

Release Date: May 2018
Revision: 01

Revision Description: This bulletin has been revised to add the requirement for an SPS warranty claim code to accompany warranty transaction submission, and to add notes to the service procedure. Please discard all copies of bulletin 17089.

Attention: The vehicle population involved in discontinued Voluntary Emission Recall 15594 has now been transferred to recall 17089. Customers are being instructed to return their vehicles for repair regardless of whether recall 15594 was performed previously.

Make	Model	Model Year		RPO	Description
		From	To		
Chevrolet	Cruze	2014	2015	LUZ	2.0L Diesel Engine

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

Condition	<p>General Motors has decided to conduct a Voluntary Emission Recall involving certain 2014 and 2015 model year Chevrolet Cruze model vehicles equipped with a 2.0L (RPO LUZ) diesel engine. On some vehicles, depending on driving habits, soot may build up on the engine's NOx position 1 sensor and / or oxygen sensor, causing the vehicle Check Engine Indicator to illuminate.</p> <p>An earlier correction for this condition (Voluntary Emission Recall 15594) may, under certain driving conditions, inadvertently cause the vehicle Check Engine Indicator to illuminate.</p>
Correction	<p>For vehicles that were not serviced under previous recall 15594, dealers are to replace the NOx position 1 sensor and reprogram the engine control module with a modified calibration, and initiate a Diesel Particulate Filter cleaning cycle</p> <p>For vehicles previously serviced under recall 15594, dealers are to reprogram the engine control module with a modified calibration, and initiate a Diesel Particulate Filter cleaning cycle.</p> <p>Confirm status of recall 15594 following the instructions in the Warranty Information section.</p>

Parts

Quantity	Part Name	Part No.
1	NOx Sensor (Position 1)	12662658

Warranty Information

Due to the discontinuation of recall 15594, all vehicles involved in recall 15594 will appear as "closed" on the Global Warranty Summary page. In order to confirm if recall 15594 was completed please click [View Vehicle Transaction History](#). The individual transaction card for recall 15594 will indicate, "9101952-N150594 - Nitrogen Oxides Sensor Replacement - Position 1 and Engine Control Module Reprogramming" if the vehicle was previously repaired.

Labor Operation	Description	Labor Time	Trans. Type	Net Item
9103087**	Recall 15594 Not Performed: Nitrogen Oxides Sensor Replacement - Position 1, DPF Regen Enable, Engine Control Module Reprogramming with SPS	1.5	ZFAT	N/A
9103088**	Recall 15594 Previously Performed: Engine Control Module Reprogramming with SPS	1.1*	ZFAT	N/A

*Time includes DPF Service Regeneration procedure, fuel trim reset, NOx sensor reset, and resetting the Engine Oil Life.

** To avoid warranty transaction rejections, the SPS Warranty Claim Code must be entered when submitting this transaction. Note that if multiple modules are reprogrammed, all claim codes must be entered with a comma separating each code.

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Warranty Claim Code Information Retrieval

If the SPS Warranty Claim Code was not recorded on the Job Card, the code can be retrieved in the SPS system as follows:

- Open TIS on the computer used to program the vehicle
- Select and start SPS
- Select Settings
- Select the Warranty Claim Code tab

The VIN, Warranty Claim Code and Date/Time will be listed on a roster of recent programming events. If the code is retrievable, dealers should resubmit the transaction making sure to include the code in the SPS Warranty Claim Code field.

Service Procedure

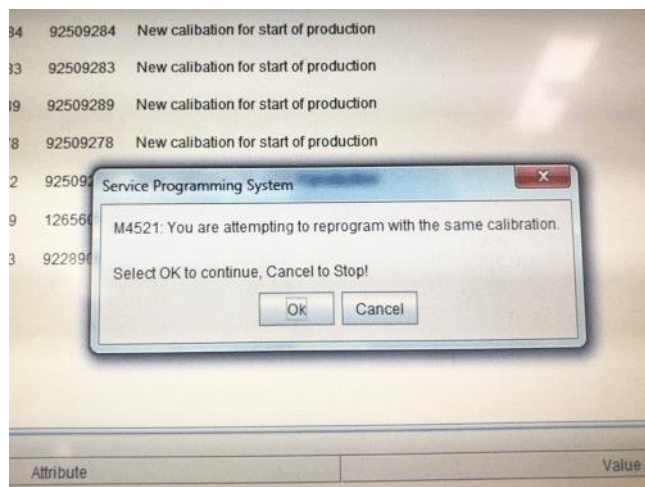
Determine if recall 15594 has been completed on this vehicle. Refer to Warranty Information section above.

Recall 15594 Not Performed on Vehicle

1. Remove the Nitrogen Oxides (NOx) sensor. Refer to *Nitrogen Oxides Sensor Replacement - Position 1* in SI.
2. Install a new NOx sensor. Refer to *Nitrogen Oxides Sensor Replacement - Position 1* in SI.

Note: Carefully read and follow the instructions below.

- Ensure the programming tool is equipped with the latest software and is securely connected to the data link connector. 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.
- Clear DTCs after programming is complete. Clearing powertrain DTCs will set the Inspection/Maintenance (I/M) system status indicators to NO.



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Note: If the Same Calibration/Software Warning is noted on the SPS controller screen, select “OK” and continue programming.

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3. Reprogram the K20 Engine Control Module. Refer to *K20 Engine Control Module: Programming and Setup (LUZ)* in SI.

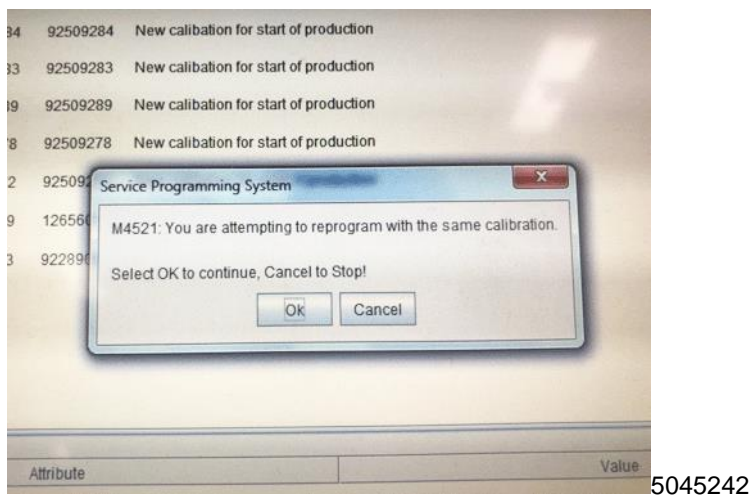
Warning: Tailpipe outlet exhaust temperature will be greater than 300°C (572°F) during this procedure. To help prevent personal injury or property damage from fire or burns, perform the following:

- Do NOT connect any shop exhaust removal hoses to the vehicle tailpipe.
 - Park the vehicle outdoors and keep people, other vehicles, and combustible material away during this procedure.
 - Do NOT leave the vehicle unattended.
4. Perform the Diesel Particulate Filter (DPF) Service Regeneration Enable procedure with a scan tool. Refer to *Diesel Particulate Filter DPF Regeneration Enable* in SI.
 5. Perform a fuel trim reset with a scan tool.
 6. With a scan tool, reset the Engine Oil Life Remaining back to the original percentage recorded before the control module was replaced, if available.

15594 Previously Performed on Vehicle

Note: Carefully read and follow the instructions below.

- Ensure the programming tool is equipped with the latest software and is securely connected to the data link connector. 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.
- Clear DTCs after programming is complete. Clearing powertrain DTCs will set the Inspection/Maintenance (I/M) system status indicators to NO.



Note: If the Same Calibration/Software Warning is noted on the SPS controller screen, select “OK” and continue programming.

1. Reprogram the K20 Engine Control Module. Refer to *K20 Engine Control Module: Programming and Setup (LUZ)* in SI.

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 3. Perform a fuel trim reset with a scan tool.
 4. With a scan tool, reset the Engine Oil Life Remaining back to the original percentage recorded before the control module was replaced, if available.

FOR CALIFORNIA, CONNECTICUT, DELAWARE, MARYLAND, MASSACHUSETTS, MAINE, OREGON, VERMONT, WASHINGTON VEHICLES ONLY AND IN THE EVENT OF AN EPA-ORDERED EMISSIONS RECALL: Install a Recall Identification Label upon recall completion. See General Motors Service Policies and Procedures Manual, Section 6.1.4 - Recall Identification Label, for details.

CALIFORNIA VEHICLES ONLY: Complete a "Proof of Correction" certificate and provide to the vehicle owner upon recall completion.

Dealer Responsibility

All new, used, GM Certified Used, courtesy transportation vehicles, dealer shuttle vehicles, etc. in dealers' possession and subject to this recall 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, used for demonstration, or any other purpose.

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. 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, or once again be used in the CTP program.

Dealers are to service all vehicles subject to this recall at no charge to customers, regardless of mileage, age of vehicle, or ownership, from this time forward.

Customers who have recently purchased vehicles sold from your vehicle inventory, and for which there is no customer information indicated on the dealer 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. A copy of the customer letter is provided in this bulletin for your use in contacting customers. Recall follow-up cards should not be used for this purpose, since the customer may not as yet have received the notification letter.

In summary, whenever a vehicle subject to this recall enters your vehicle inventory, or is in your dealership for service in the future, you must take the steps necessary to be sure the recall correction has been made before selling or releasing the vehicle.

*****THE FOLLOWING 2 PARAGRAPHS ARE NOT FOR CANADA OR EXPORT*****

When a California emissions recall is completed by a GM dealer, the dealer must provide the vehicle owner a "Proof of Correction Certificate" which the owner may need to present to the California Department Of Motor Vehicles (DMV) when renewing their vehicle registration. Without this correction certificate, the owner may be unable to renew their vehicle registration.

Additional Certificates can be obtained, at no charge, from the 1Store application in GlobalConnect. Request GM Item Number 1825 when ordering.

Dealer Reports

For dealers with involved vehicles, a listing with involved 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 recall is a violation of law in

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several states/provinces/countries. Accordingly, you are urged to limit the use of this report to the follow-up necessary to complete this recall.

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 recall on their vehicle (see copy of customer letter included with this bulletin).

In order to ensure full protection under the emission warranty, and the right to participate in future recalls, the customer notification letter recommends that customers have their vehicles serviced as soon as possible. It also advises that failure to do so could legally be determined to be lack of proper maintenance.

Export - Letters will be sent to known owners of record located within areas covered by the US National Traffic and Motor Vehicle Safety Act. For owners outside these areas, dealers should notify customers using the attached sample letter.

In order to ensure full protection under the emission warranty, and the right to participate in future recalls, the customer notification letter recommends that customers have their vehicles serviced as soon as possible. It also advises that failure to do so could legally be determined to be lack of proper maintenance.

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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June 2017

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

Dear General Motors Customer:

This notice is sent to inform you that General Motors is conducting a voluntary emission recall that includes your vehicle.

Reason For This Recall: Depending on driving habits, soot may build up on the engine NOx position 1 sensor and / or oxygen sensor causing the vehicle Check Engine Indicator to illuminate.

An earlier correction for this condition (Product Emission Recall 15594) may, under certain driving conditions, inadvertently cause the vehicle Check Engine Indicator to illuminate.

If your vehicle had not yet been serviced under recall 15594, and you previously received a letter notifying you that General Motors had suspended repairs on recall 15594 in order to make additional improvements to the repair software, those repairs are now ready to resume and your vehicles will receive those repairs under this recall 17089.

Your vehicle will require repair regardless of whether recall 15594 was previously completed on your vehicle.

What Will Be Done: For vehicles that were **not serviced** under previous recall 15594, your dealer will replace the NOx position 1 sensor, reprogram the engine control module with a modified calibration and initiate a Diesel Particulate Filter cleaning cycle.

For vehicles **previously serviced** under recall 15594, dealers are to reprogram the engine control module with a modified calibration and initiate a Diesel Particulate Filter cleaning cycle.

These services will be performed at no charge.

Your GM dealer will replace the NOx position 1 sensor, reprogram the Engine Control Module with a modified calibration and initiate a Diesel Particulate Filter cleaning cycle. This service will be performed for you at no charge.

How Long Will The Repair Take? Because of service scheduling requirements, it is likely that your dealer will need your vehicle longer than the actual service correction time of approximately 90 minutes.

What You Should Do: Please contact your Chevrolet dealer as soon as possible to arrange a service date and to assure parts availability. Instructions for making this correction have been sent to your dealer. Please ask your dealer if you wish to know how much time will be needed to schedule, process, and repair your vehicle.

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	1-800-630-2438	1-800-833-2438
Puerto Rico – English	1-800-496-9992	
Puerto Rico – Español	1-800-496-9993	
Virgin Islands	1-800-496-9994	

Emission Law Information: In order to ensure your full protection under the emission warranty made applicable to your vehicle by state and federal law, and your right to participate in future recalls, it is recommended that you have your vehicle serviced as soon as possible. Failure to do so could legally be determined to be lack of proper maintenance of your vehicle. Also, your vehicle may fail a state or local emission inspection if this recall is not accomplished.

IMPORTANT MESSAGE FOR CALIFORNIA RESIDENTS

The California Air Resources Board (CARB) requires vehicle emission recalls be completed prior to California registration renewal. Uncorrected emission recalls will result in the inability to renew your California vehicle registration.

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At the time of emission recall completion, your California dealer will issue a "Proof of Correction Certificate". Keep this certificate and, if required, present it to the Department of Motor Vehicles when renewing your California registration as proof of recall completion.

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

Jeffrey M. Boyer
Vice President
Global Vehicle Safety

17089

GLOBAL SAFETY FIELD INVESTIGATIONS
DCS4751
URGENT - DISTRIBUTE IMMEDIATELY

Date: May 15, 2018

Subject: 17089 01 - Product Emission Recall
NOx Position 1 Sensor Replacement
Revised Warranty and Service Sections

Models: 2014-2015 Chevrolet Cruze Equipped with 2.0L Diesel Engine (LUZ)

To: All General Motors Dealers

This bulletin is being revised to add the requirement for an SPS warranty claim code to accompany warranty transaction submission, and to add notes to the service procedure. Please discard all copies of bulletin 17089.

END OF MESSAGE
GLOBAL SAFETY FIELD INVESTIGATIONS