15594 NOx Position 1 Sensor Replacement



Reference Number: N150594 Release Date: October 2016

Revision: 00

		Model Year			
Make	Model	From	То	RPO	Description
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	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.
Correction	Dealers are to replace the NOx position 1 sensor and reprogram the engine control module with a
	modified calibration.

Parts

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

Warranty Information

Labor	Description	Labor	Trans.	Net
Operation		Time	Type	Item
9101952	Nitrogen Oxides Sensor Replacement - Position 1, DPF Regen Enable, Engine Control Module Reprogramming with SPS	1.5	ZFAT	N/A

Service Procedure

- 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.

- Do NOT attempt to order the calibration number 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. 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 SPS prompts for the correct ignition switch position.
- Clear DTCs after programming is complete. Clearing powertrain DTCs will set the Inspection/Maintenance (I/M) system status indicators to NO.
- Prior to programming, record the engine oil life percentage remaining.

15594 NOx Position 1 Sensor Replacement



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.
- 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 <u>must</u> be held and inspected/repaired per the service procedure of this bulletin <u>before</u> 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.

15594 NOx Position 1 Sensor Replacement



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 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

15594 NOx Position 1 Sensor Replacement





	November 2016
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.

What Will Be Done: 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.

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

GLOBAL SAFETY FIELD INVESTIGATIONS DCS4224 URGENT - DISTRIBUTE IMMEDIATELY

Date: October 24, 2016

Subject: 15594 - Emission Recall

NOx Position 1 Sensor Replacement

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

To: All General Motors Dealers

General Motors is releasing Emission Recall 15594 today. The total number of U.S. vehicles involved is approximately 12,540. Please see the attached bulletin for details.

Customer Letter Mailing

The customer letter mailing will begin on November 3, 2016.

Global Warranty Management (GWM)

The Investigate Vehicle History (IVH) screen in the GWM system will be updated October 24, 2016. A list of involved vehicles in dealer new inventory is attached to this message. Please hold all warranty transactions until the VIN appears in IVH.

END OF MESSAGE GLOBAL SAFETY FIELD INVESTIGATIONS