



Service Bulletin

Bulletin No.: 16-NA-206

Date: January, 2022

INFORMATION

Subject: A New Way to Look at NOx Sensor Readings and Exhaust Temperature During a DPF Regeneration or a Reductant System Malfunction Warning Service Bay Test

| Brand: | Model: | Model Year: | | VIN: | | Engine: | Transmission: |
|-----------|----------|-------------|------|------|----|----------------------|---------------|
| | | from | to | from | to | | |
| Chevrolet | Colorado | 2016 | 2022 | | | 2.8L Diesel (LWN) | |
| | Express | 2017 | | | | | |
| GMC | Canyon | 2016 | | | | | |
| | Savana | 2017 | | | | | |

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|-----------------------------------|---|
| Involved Region or Country | North America, Middle East, Israel, Palestine, GM Korea Company |
|-----------------------------------|---|

Introduction

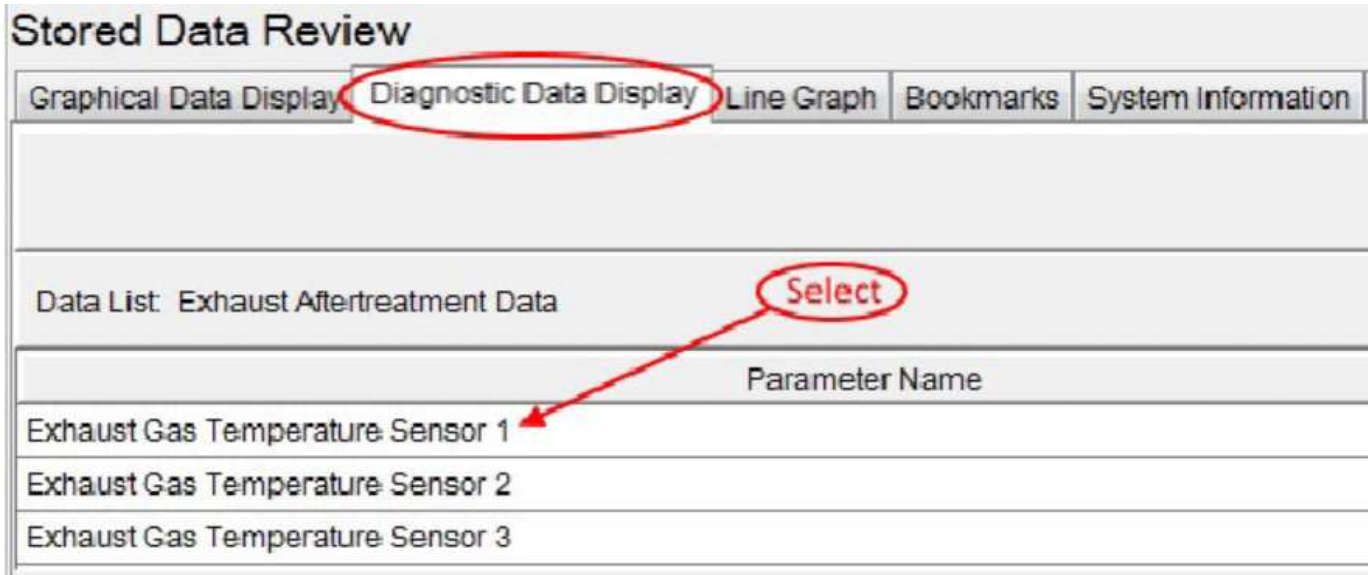
The following procedure is to aid in graphing NOx sensor readings and temperature sensor readings using the GDS2.

Information for the temperatures and NOx sensors can be pulled from the DPF Service Regeneration and the Reductant System Malfunction Warning Service Bay Test from session files or stored data in GDS2.

Suggested Procedure for Graphing the DPF Service Regeneration Temperatures

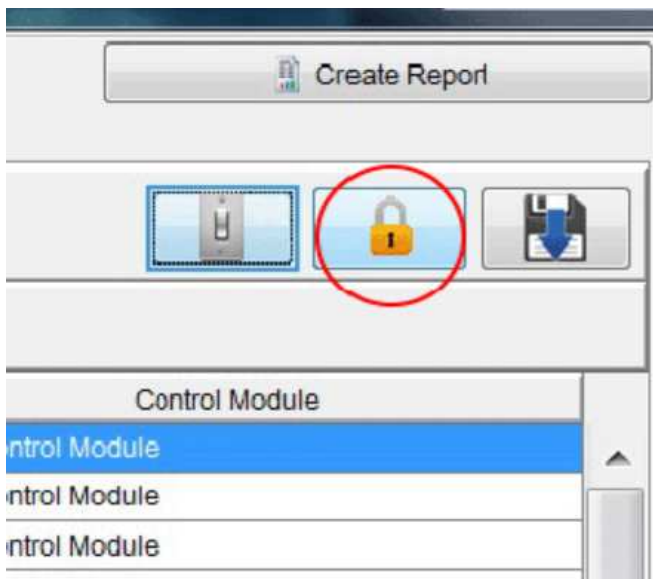
Locate the DPF Service Regeneration in the Stored Data:

1. Select the Review Tab.



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2. Select the Diagnostic Data Display tab.
3. Select the Exhaust Gas Temperature Sensor 1.



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Note: The LOCK PARAMETER BUTTONS must be selected after each parameter has been selected to be graphed.

4. Select the Lock Parameter button located at the upper right side of display.
5. Repeat the steps above to add the Exhaust Gas Temperature Sensor 2, 3, 4 and 5.

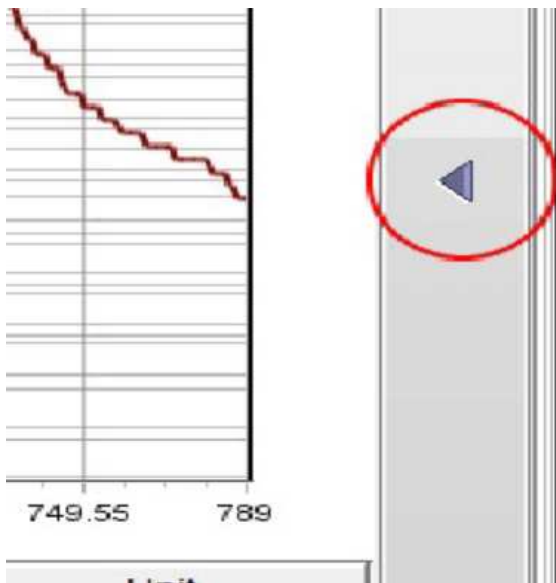
Stored Data Review

Graphical Data Display | Diagnostic Data Display | **Line Graph** | Bookmarks | System Informa

Data List: Exhaust Aftertreatment Data

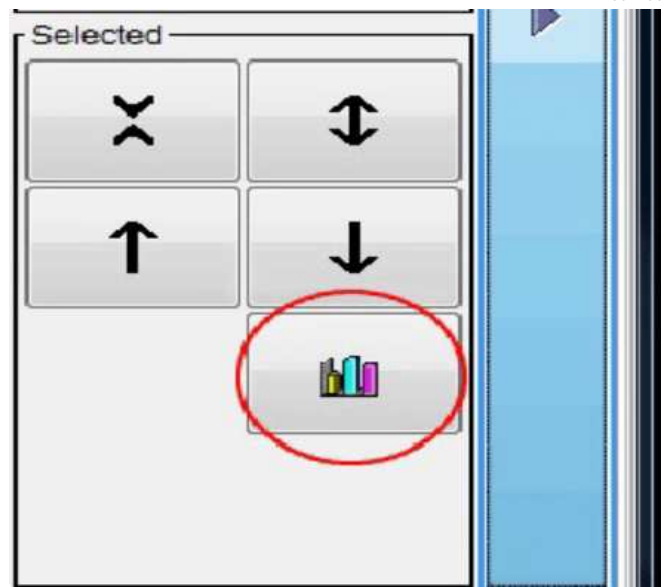
| Parameter Name |
|----------------------------------|
| Exhaust Gas Temperature Sensor 1 |
| Exhaust Gas Temperature Sensor 2 |
| Exhaust Gas Temperature Sensor 3 |
| Exhaust Gas Temperature Sensor 4 |
| Exhaust Gas Temperature Sensor 5 |

6. Select the Line Graph tab.



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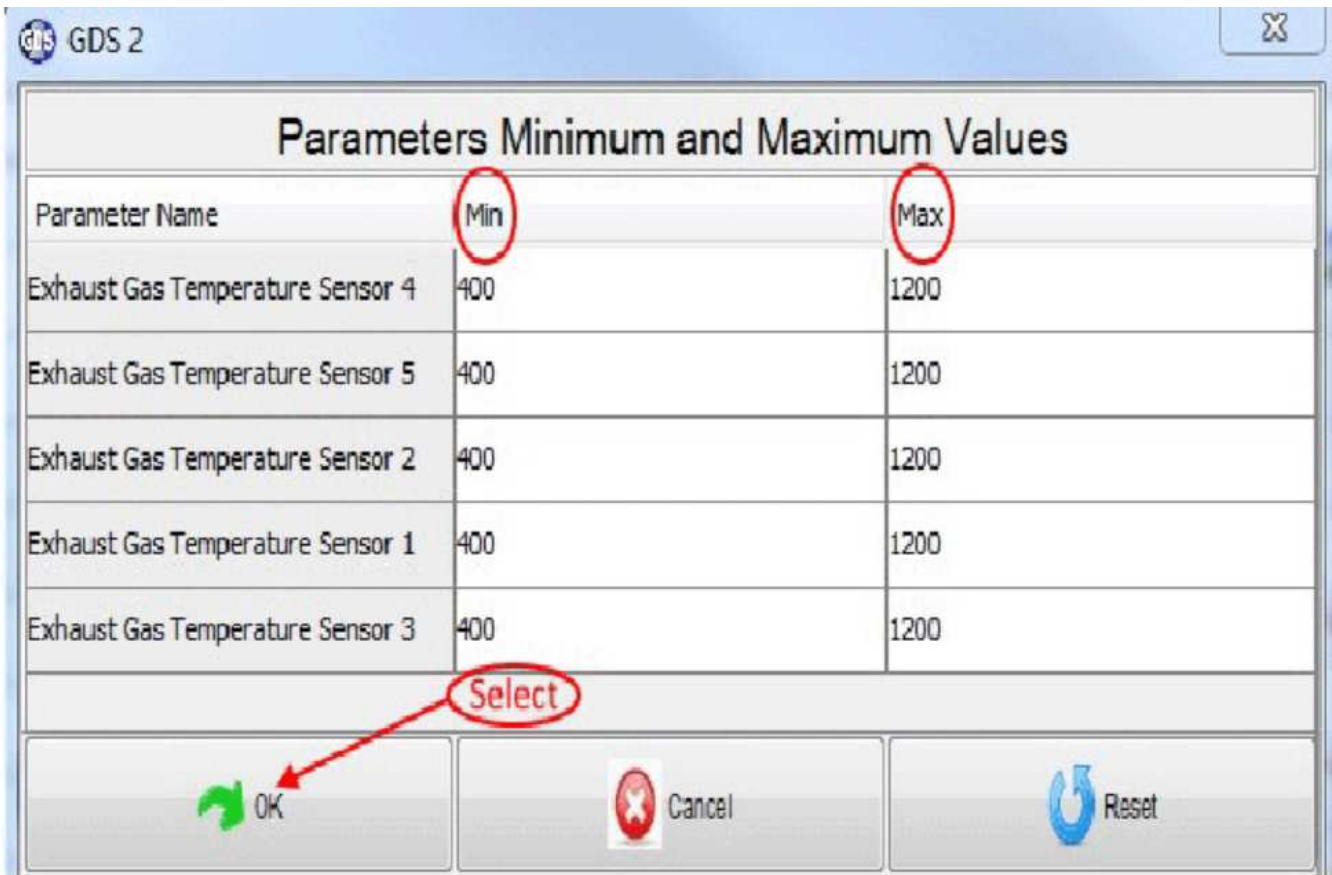
7. On the right side of the display, select the Show/Hide Control arrow button.



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8. Select the Change Scale button.

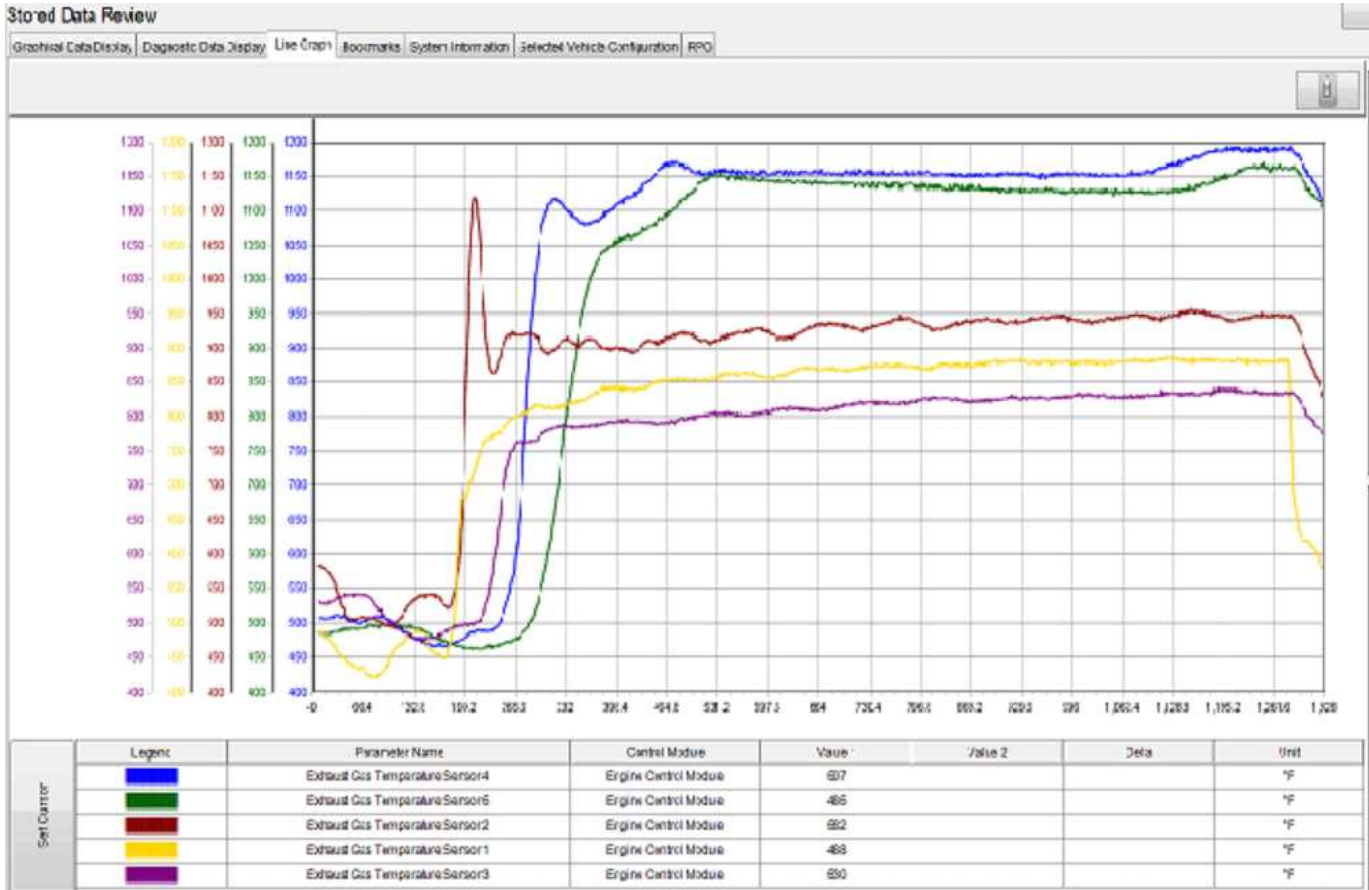


Note: When selecting the temperature values, the parameters should be all on the same scale.

- 9. Under the Parameters Values, select the MIN and MAX parameters for graphing out the readings.
- 10. Select OK.

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Graph Results



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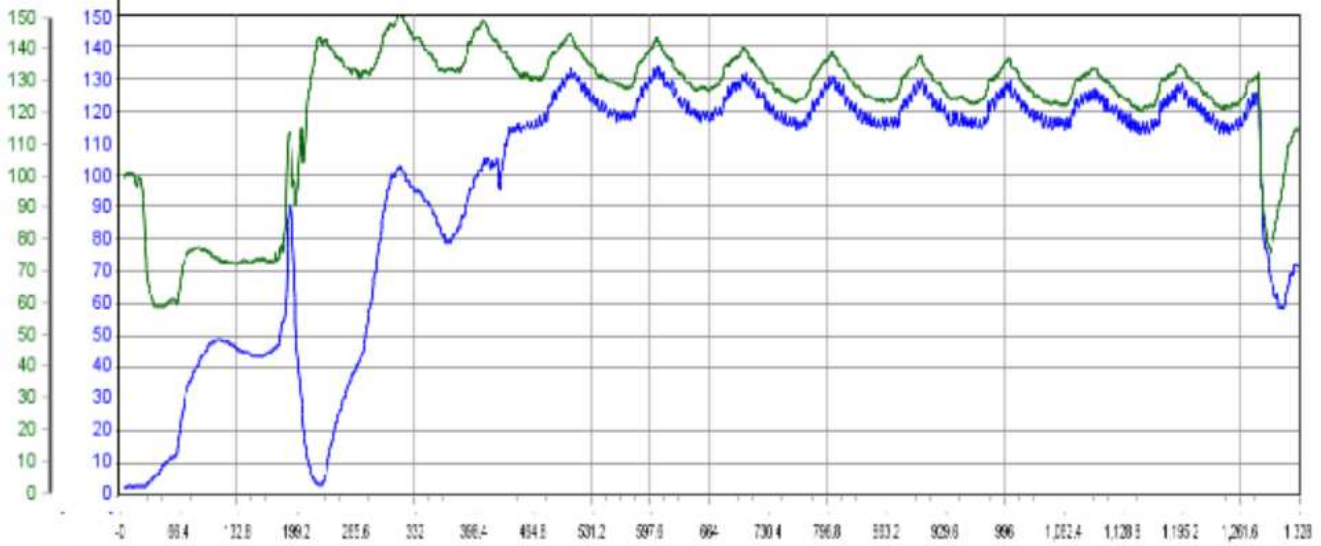
Graphed results of the exhaust temperatures during the DPF Service Regeneration.

Recommended parameter values;

- Enter 400 under MIN.
- Enter 1200 under MAX.

Stored Data Review

Graphical Data Display Diagnostic Data Display Live Graph Home Mode System Information Selected Vehicle Configuration RATS



| Legend | Parameter Name | Control Module | Value 1 | Value 2 | Delta | Unit |
|--------------------------------------|----------------------------------|-----------------------|---------|---------|-------|------|
| ■ | NOx Concentration (NOx Sensor 2) | Engine Control Module | 25 | | | ppm |
| ■ | NOx Concentration (NOx Sensor 1) | Engine Control Module | 99.4 | | | ppm |

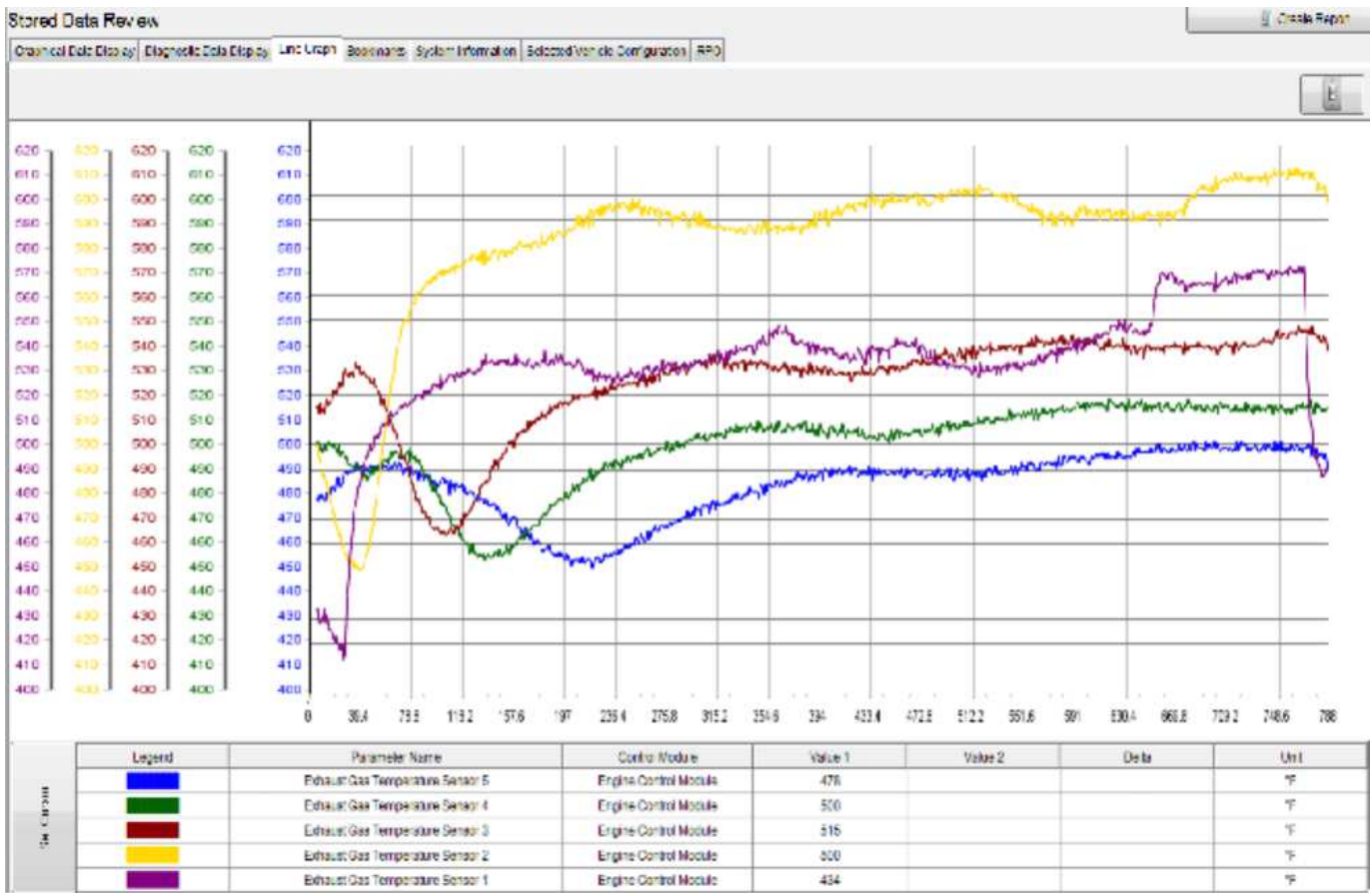
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Note: NOx Sensor 2 may have higher readings than the NOx sensor 1 during a regeneration.

Graphed results of the NOx sensors during the DPF Service Regeneration.

Recommended parameter values;

- Enter 0 under MIN.
- Enter 200 under MAX.

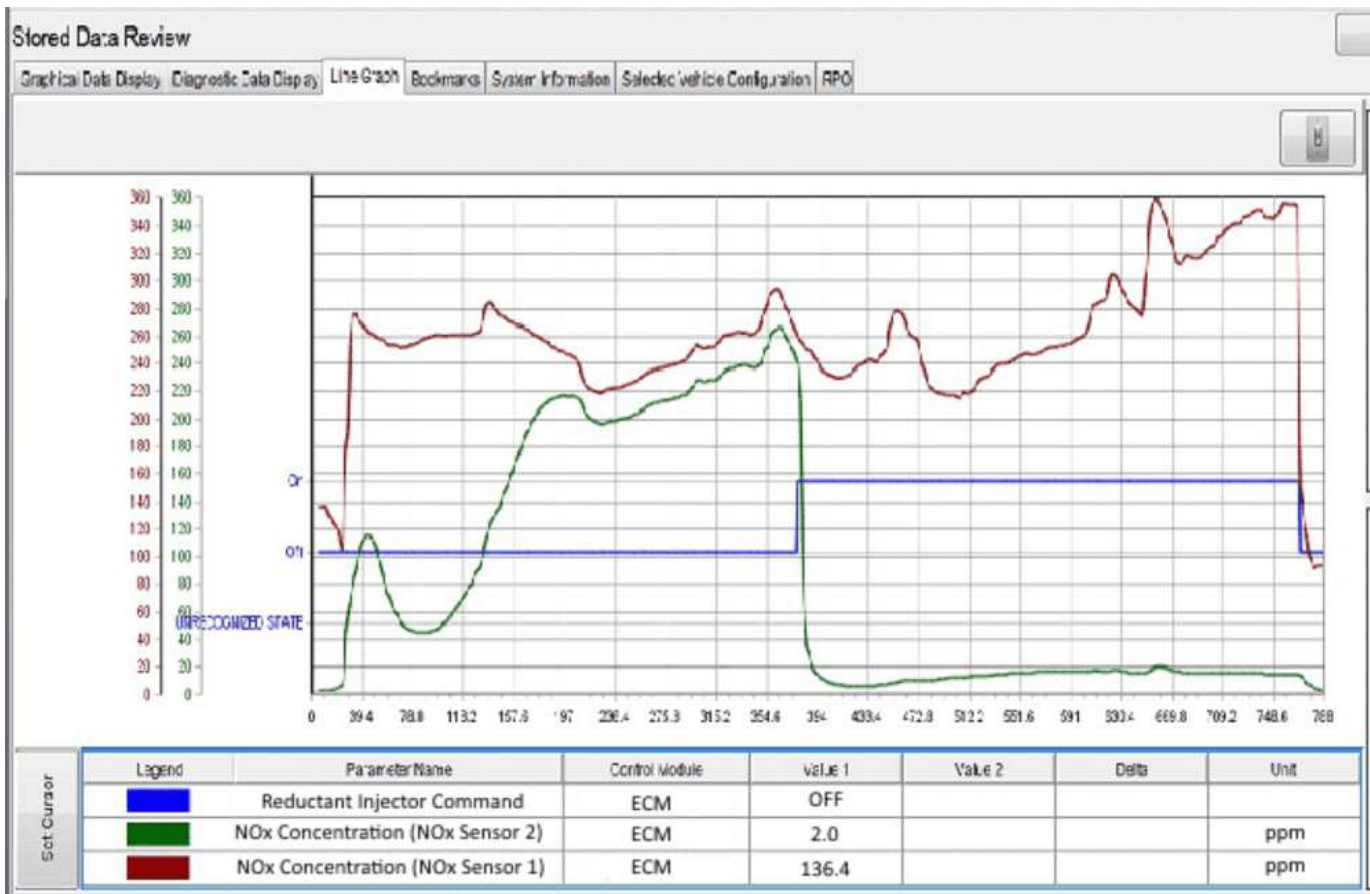


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Graphed results of the exhaust temperature readings during the Reductant System Malfunction Warning Service Bay test.

Recommended parameter values;

- Enter 400 under MIN.
- Enter 620 under MAX.



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Graphed results of the NOx sensor readings during the a Reductant System Malfunction Warning Service Bay test.

Recommended parameter values;

- Enter 0 under MIN.
- Enter 360 under MAX.

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| Version | 4 |
| Modified | Released June 23, 2016 Revised September 05, 2017 — Updated Model Years. Revised October 22, 2020 - Added 2019-2021 Model Years. Revised January 05, 2022 - Added 2022 to Model Year and Express and Savanna to Models. |

Additional Keywords 2.8, soot, fuel, NOx, Nitrogen Oxide, O2, Regen, Regeneration, Fuel, SCR, LWN, EGT, DOC, DPF, Exhaust, Particulate, Fluid, Quality, Message, P2463, P20EE, P219D, P249E, P2BAA, P2459, P144E, P144F

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