



Service Bulletin

File in Section: -

Bulletin No.: 16-NA-212

Date: July, 2016

INFORMATION

Subject: A New Way to Look at NOx Sensor Readings and Exhaust Temperature During a DPF Regeneration or a Reductant Fluid Quality Test

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Express	2014	2016			6.6L (LML, LGH)	
	Silverado						
GMC	Savana						
	Sierra HD						

Involved Region or Country	North America and N.A. Export Regions
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Introduction

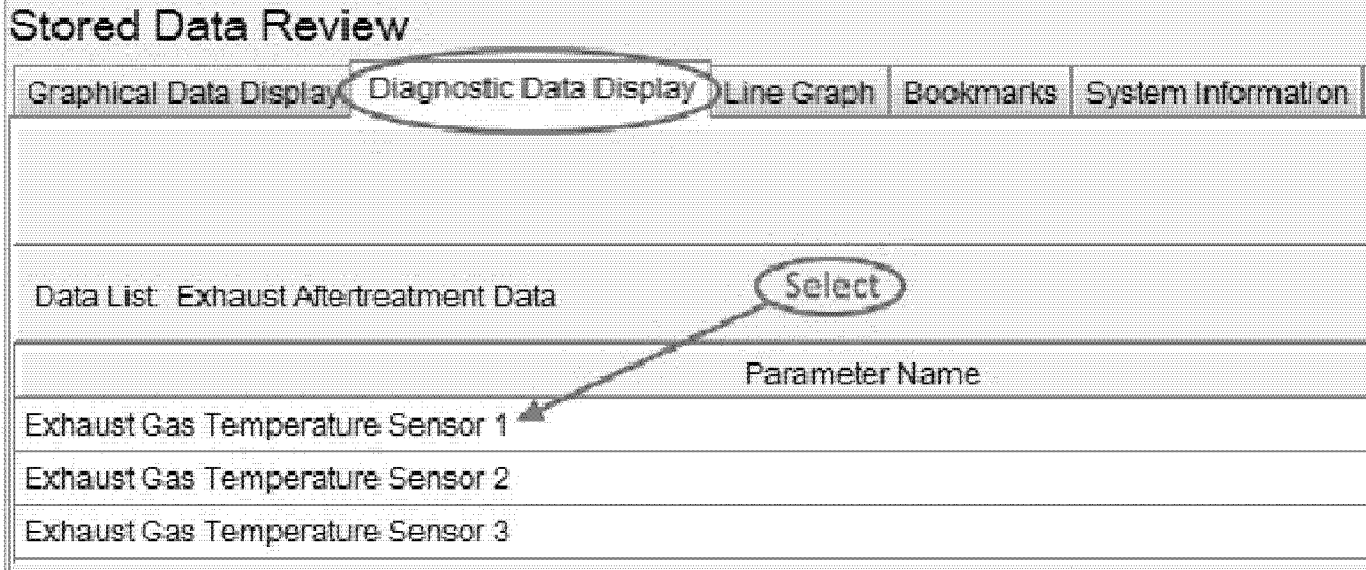
The following procedure is to aid in graphing NOx sensor readings and temperature sensor readings using the GDS2.

Information for the temperatures and NOx sensors can be pulled from the DPF Service Regeneration and the Reductant Fluid Quality Test procedures from session files or stored data in GDS2.

Suggested Procedure for Graphing the DPF Service Regeneration Temperatures

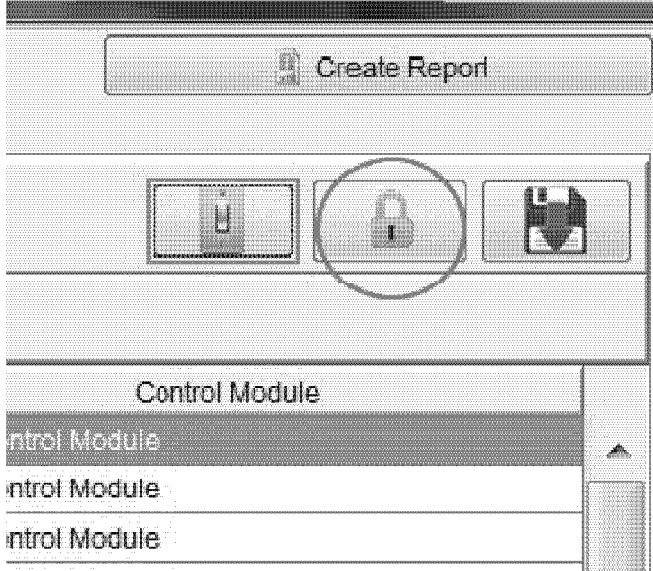
Locate the DPF Service Regeneration in the Stored Data:

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 and 4.
6. Select the DPF Soot Accumulation.

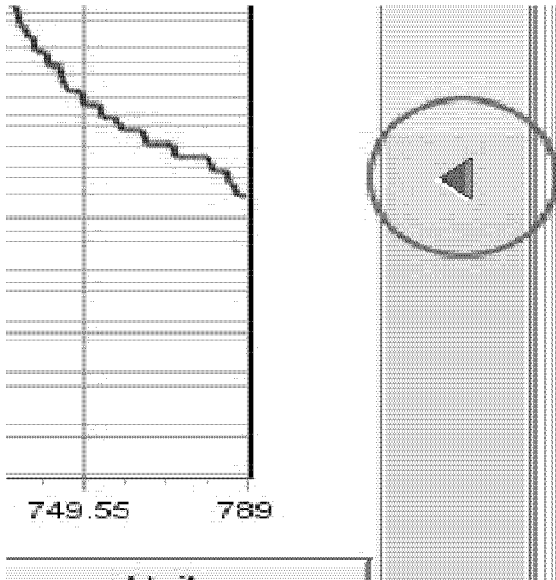
Stored Data Review

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

Data List: Exhaust Aftertreatment Data

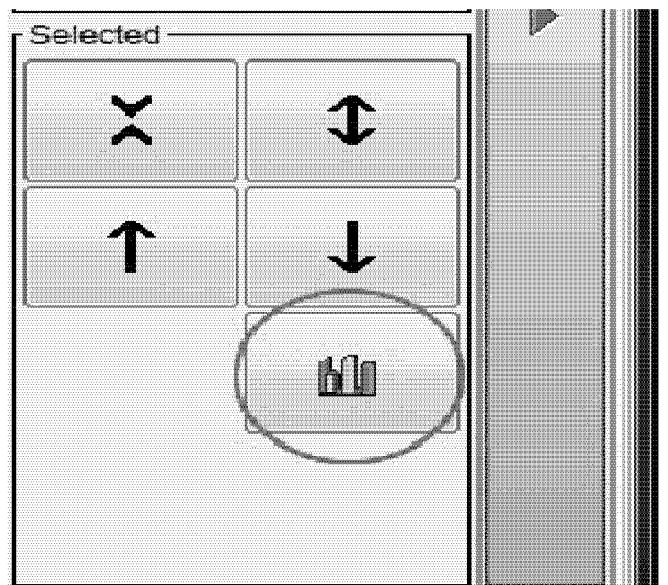
Parameter Name
Exhaust Gas Temperature Sensor 1
Exhaust Gas Temperature Sensor 2
Exhaust Gas Temperature Sensor 3

7. Select the Line Graph.



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



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9. Select the Change Scale button.

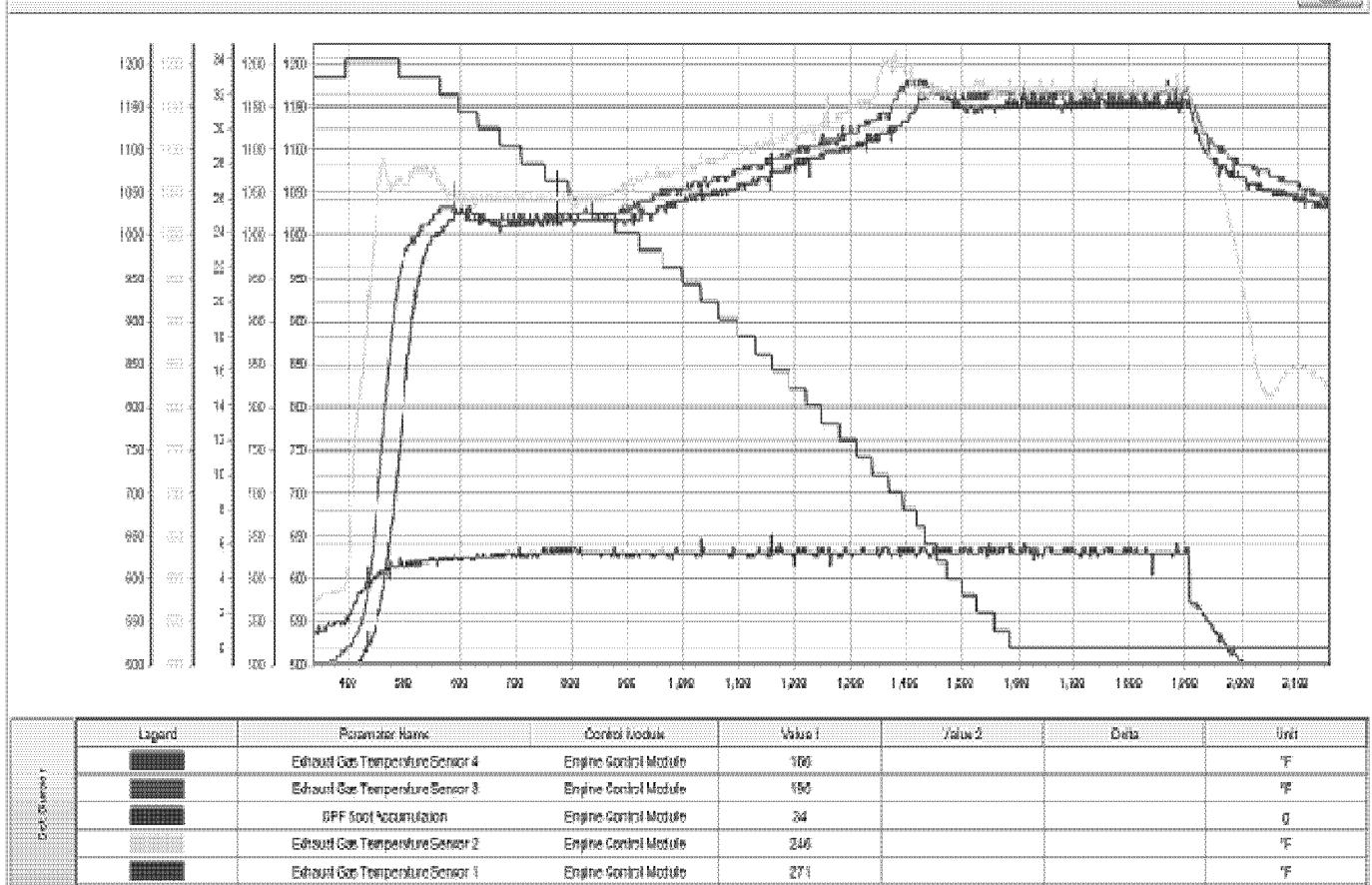
Parameter Name	Min	Max
Exhaust Gas Temperature Sensor 1	300	1225
Exhaust Gas Temperature Sensor 2	300	1225
CPW Switch Accumulation	0	25
Exhaust Gas Temperature Sensor 3	300	1225
Exhaust Gas Temperature Sensor 4	300	1225

Buttons: OK, Cancel, Reset

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

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

Graph Results

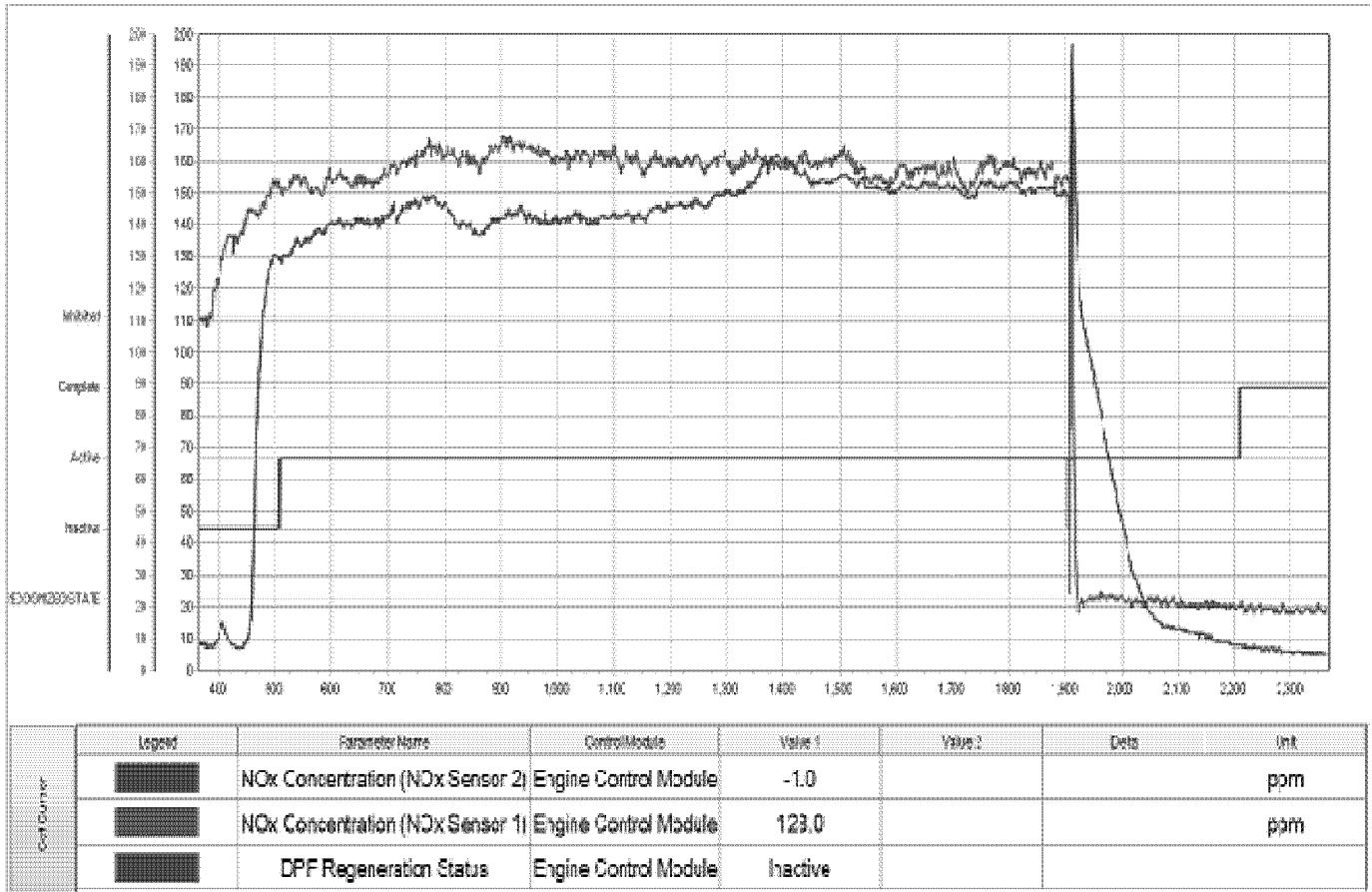


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Graphed results of the exhaust temperatures during the DPF Service Regeneration.

Recommended parameter values;

- Enter 500 under MIN.
- Enter 1225 under MAX.



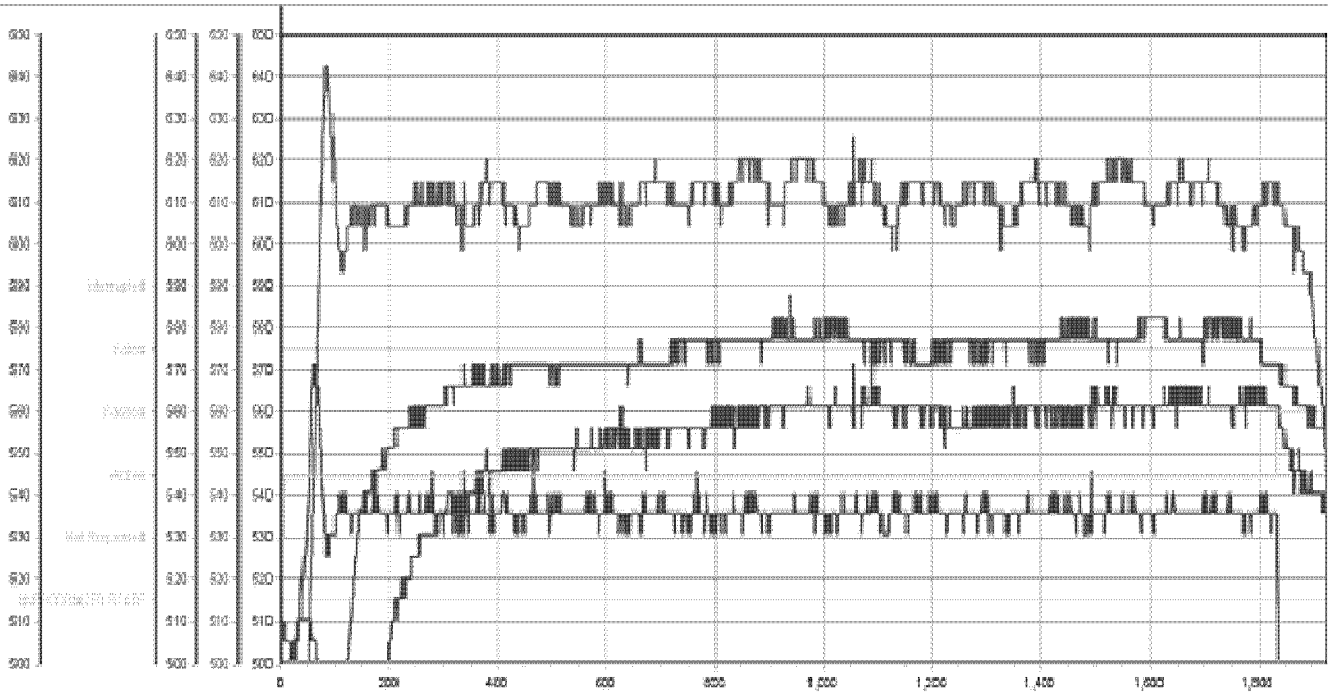
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Note: NOx Sensor 2 may have higher readings than the NOx sensor 1 during a regeneration.

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

Recommended parameter values;

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



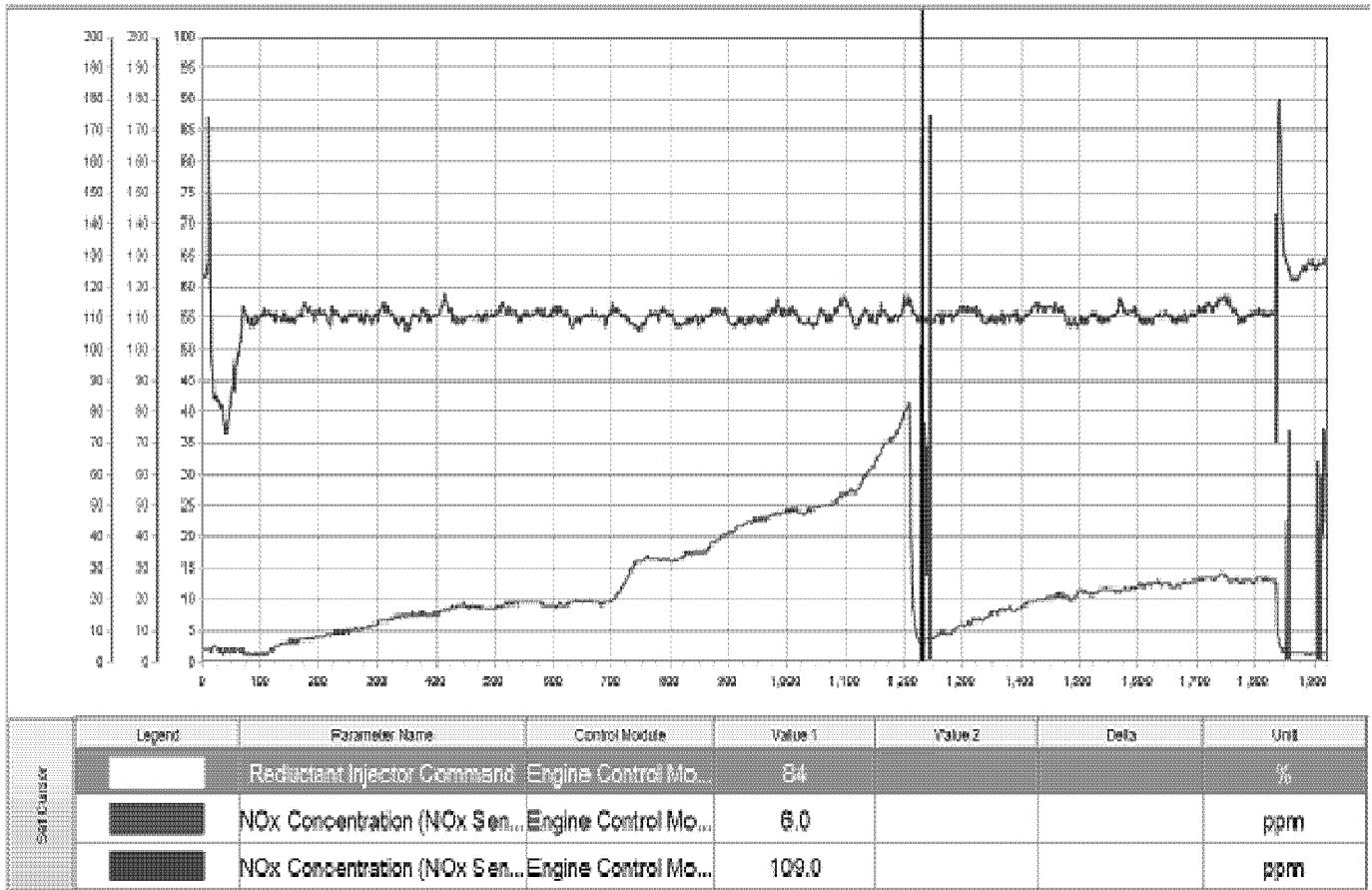
SOI Counter	Legend	Parameter Name	Control Module	Value 1	Value 2	Delta	Unit
	[Solid Black]	Exhaust Gas Temperature Sensor 4	Engine Control Module	437			°F
	[Solid Grey]	Exhaust Gas Temperature Sensor 2	Engine Control Module	505			°F
	[Dotted Grey]	Exhaust Gas Temperature Sensor 1	Engine Control Module	451			°F
	[Horizontal Lines]	Reductant Fluid Quality Test	Engine Control Module	Not Requested			
	[Solid Black]	Exhaust Gas Temperature Sensor 3	Engine Control Module	496			°F

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Graphed results of the exhaust temperature readings during the Reductant Fluid Quality test.

Recommended parameter values;

- Enter 500 under MIN.
- Enter 650 under MAX.

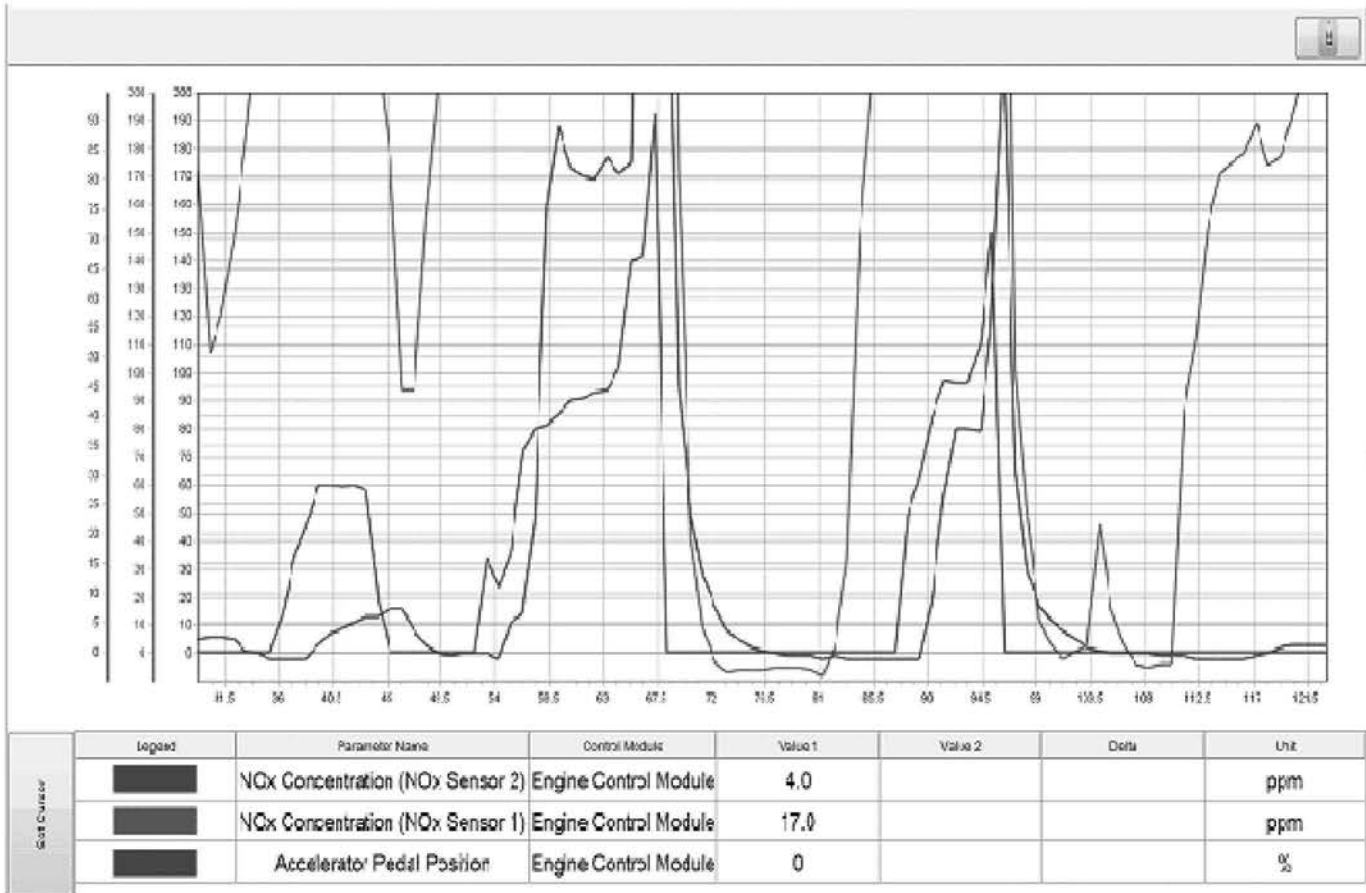


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Graphed results of the NOx sensor readings during the Reductant Fluid Quality test with DEF Reductant Injector command.

Recommended parameter values;

- Enter 0 under MIN.
- Enter 200 under MAX.
- Enter 100 for the Reductant Injector Command.



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Graphed results of NOx Concentration during Tip In and Tip Out.

- Enter 0 under MIN.
- Enter 200 under MAX.
- Enter 90 for Pedal position.

Version	1
Modified	

Additional Keywords: 6.6, soot, fuel, NOx, Nitrogen Oxide, O2, Regen, Regeneration, Fuel, SCR, LML, LGH, DOC, DPF, Poor, Exhaust, Particulate, Filter, Quality, P2463, P20EE, P2459, P2BAD, P2BAA, P249D

