



TECH TIP

SUPERSEDES TECHTIP #22-024

**DX3 MANUAL REGEN MONITOR
(NON-BURNER)**

**GROUP: 0-GENERAL
TECH TIP NO: TT-24-006
DATE: 6-5-2024**

SUBJECT VEHICLES

15MY-21MY Conventional Trucks equipped with a J08 engine or Cab Over Engine (COE) equipped with a J05 engine.

OVERVIEW:

The purpose of this procedure is to provide instructions in how to perform a manual regen recording on Hino Trucks equipped with a 5th or 7th exhaust fuel injector.

Note: This technical tip is provided as technical information and is not authorization for a warrantable repair.

REPAIR PROCEDURE:

Note: Be sure to change Unit Settings in DX3. Click **Settings** (gear in the upper right) > **Unit Setting** and then mirror the settings below, click **OK**. Log out of DX3, then Log back in to hold new settings for future DX3 connections and data monitoring.

[B1014]

Unit Setting

Distance	Mile(mile)	▼
Speed	Mile per hour(mph)	▼
Acceleration	Mph/sec(mph/sec)	▼
Capacity	US Gallon(gal)	▼
Fuel consumption rate	Mile per US Gallon(mpg)	▼
Fuel consumption rat...	Mileage per Liter(km/L)	▼
Temperature	Fahrenheit(° F)	▼
Horsepower	Horsepower(hp)	▼
Torque	Foot pounds (lb-ft)	▼
Pressure	Pound per Square Inch(PSI)	▼
Pressure (Mp)	Pound per Square Inch(PSI)	▼

OK Cancel



1. Connect DX3 and allow **Read Out** to complete. Click **Customization**, in System select **Engine CAN**, and scroll to locate **DPF Soot Amount Piling Up**. Set the soot level to **3.5g/L** for a manual regen, and click **Write**, follow DX3 to complete writing of soot level

Note: Key must be ON with the Engine OFF to write or change any value. Ignition must then be turned off for 60 seconds to finalize writing of value, and turned back on

Customization

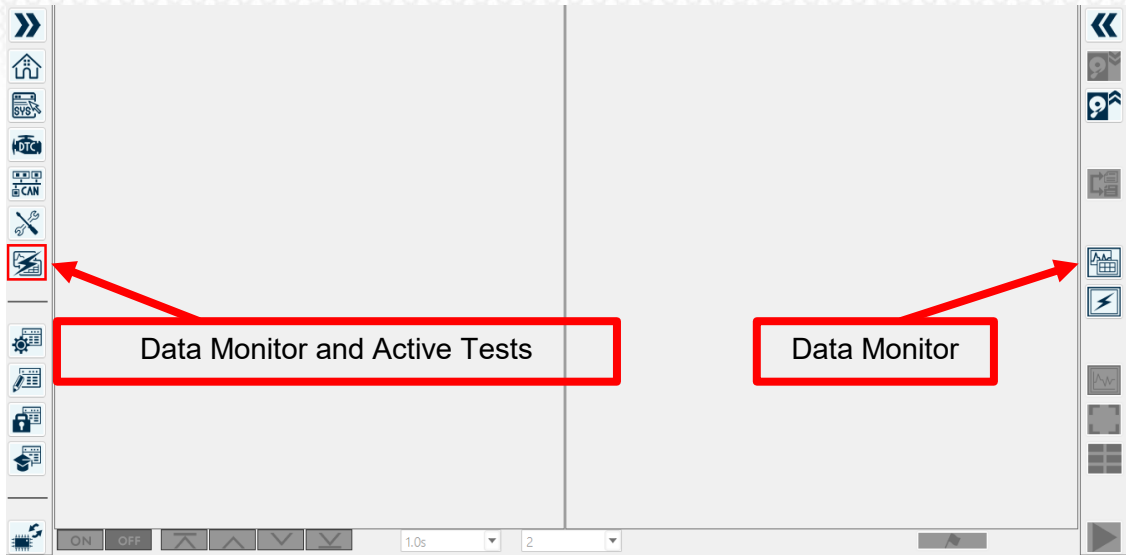
System: 01 Engine Serial(K line)

No.	Items	Initial value	Set value	Unit	Write to ECU
439	Idle Shutdown Active Minimum Coolant Temperature	-40	-40	°F	
440	Idle Shutdown Active Minimum Ambient Temperature	-40	-40		
449	Setting of economy running intensity	Low	Low		
451	Setting start idle up mode changeover	Always	Always		
453	Setting of actuation time for hill start gear change assi...	0.0	0.0	Seconds	
456	Long idling control RPM	0	0	rpm	
474	Customized Backup (data 2 byte 6 digits) 1	0	0		
534	DPF Soot Amount Piling Up	0.000	3.5	g/L	
543	PM deposit volume 1 (A09C)	0.000	0.000	g/L	
544	PM deposit volume 2	0.000	0.000	g/L	
580	Total idle fuel injection	0.0	0.0	gal	
581	Trip idle injection quantity	0.0	0.0	gal	
582	Total fuel injection quantity	0.0	0.0	gal	

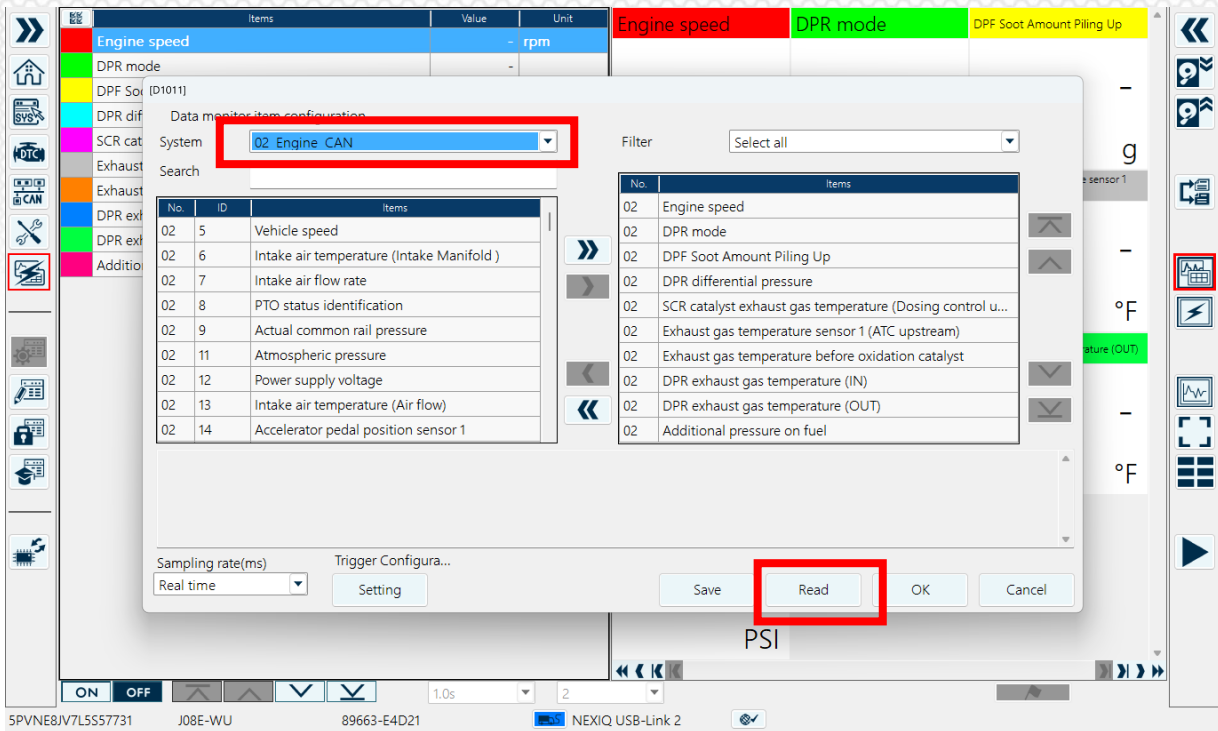
Signal description

Write Customization generation is desired.

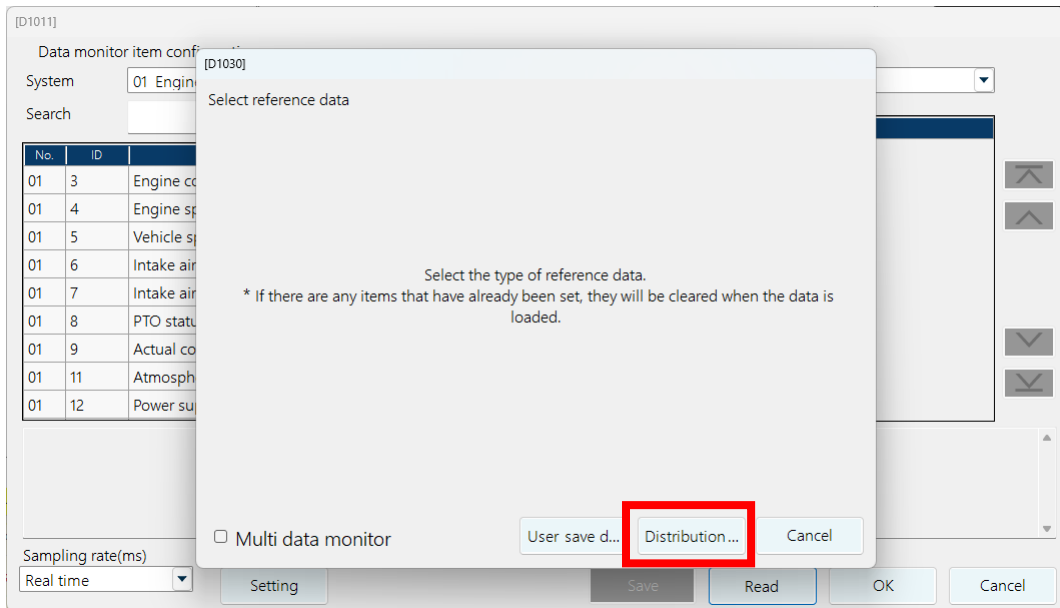
2. Select “**Data Monitor and Active Tests**” then select “**Data Monitor**”



3. In the Data Monitor Item Configuration menu on the next page, select **Engine CAN** and then **Read**



4. Select **Distribution**



5. Select **Official Aftertreatment Template 2015-2020** and then click **Open** (Note - the same template is used for conventional and cab-over trucks)

IMPORTANT

Our templates are properly adjusted to the min/max value for each parameter within the template, it is not necessary to change min/max values for each parameter when using our templates

[D1024]

Data monitor item configuration file list

File Name	Work Date	VIN	User ID
Official Injection Quantity Test Template 2011-2020 Co...	2022/10/18/11:48	sim	USAHMS010029
Official Engine Performance Template 2015-2020 Conv...	2022/10/18/15:03	sim	USAHMS010029
Official Engine Performance and NOx Template 2011-2...	2022/10/18/15:18	sim	USAHMS010029
Official Aftertreatment Template 2015-2020 Co...	2022/10/18/11:56	sim	USAHMS010029

Vehicle classification:300 series(COE) (North America)
Area:
System:Engine

Import Export **Open** Cancel

5. Start the truck, start the DX recording and then press the Manual Regen switch on the dash to start manual regen. Record until manual regen has completed.

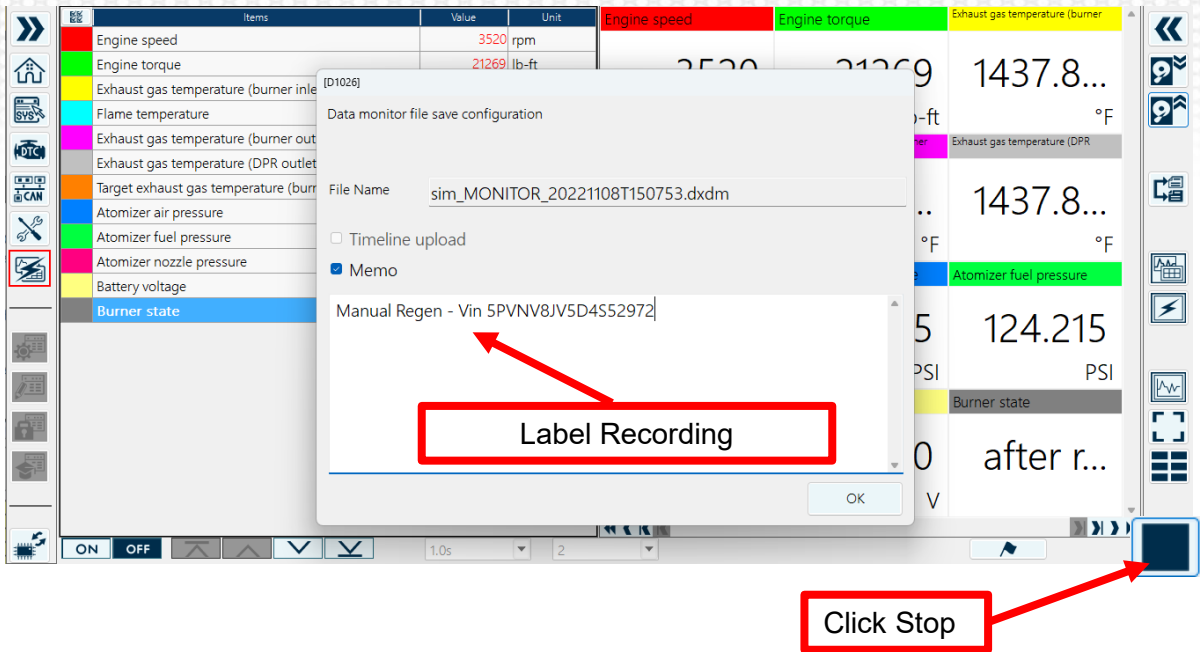
Start Recording, record until regen completes.

Items	Value	Unit
Engine speed	-	rpm
Engine torque	-	lb-ft
Exhaust gas temperature (burner inlet)	-	°F
Flame temperature	-	°F
Exhaust gas temperature (burner outlet)	-	°F
Exhaust gas temperature (DPR outlet)	-	°F
Target exhaust gas temperature (burner outlet)	-	°F
Atomizer air pressure	-	PSI
Atomizer fuel pressure	-	PSI
Atomizer nozzle pressure	-	PSI
Battery voltage	-	V
Burner state	-	-

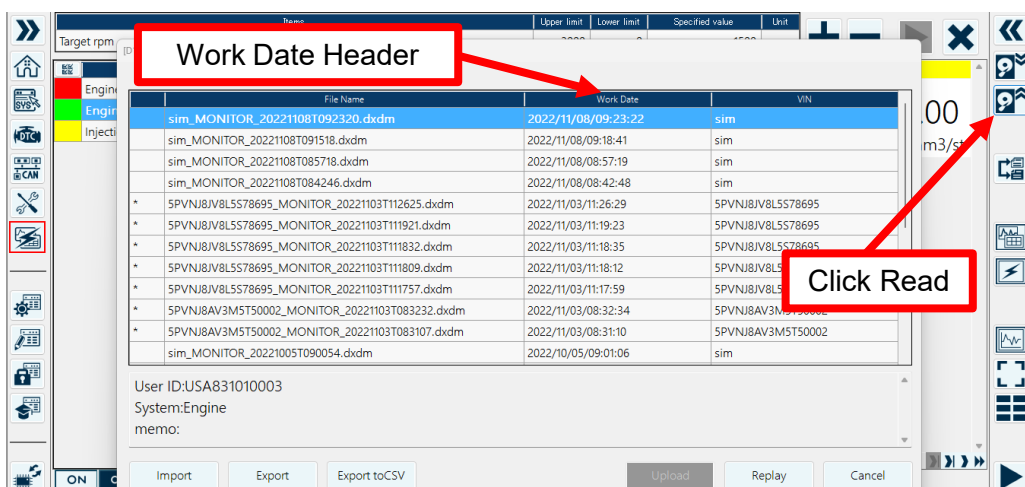
Engine speed	Engine torque	Exhaust gas temperature (burner)
-	-	-
rpm	lb-ft	°F
Flame temperature	Exhaust gas temperature (burner)	Exhaust gas temperature (DPR)
-	-	-
°F	°F	°F
Target exhaust gas temperature	Atomizer air pressure	Atomizer fuel pressure
-	-	-
°F	PSI	PSI
Atomizer nozzle pressure	Battery voltage	Burner state
-	-	-
PSI	V	-

ON OFF 1.0s 2

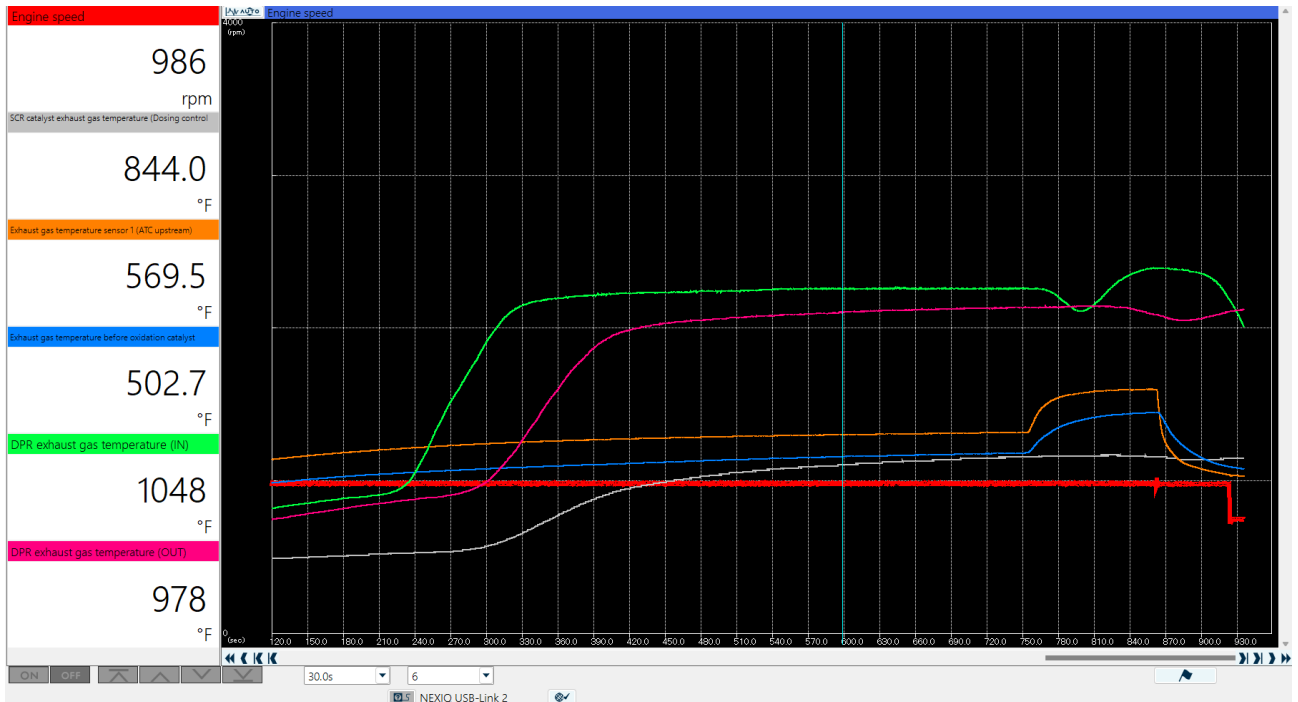
6. Click the **Stop** in the lower right of DX3 to stop the recording. In the save box, **label the recording**, be sure to include the test name and VIN or TechAssist Case number, click **OK**



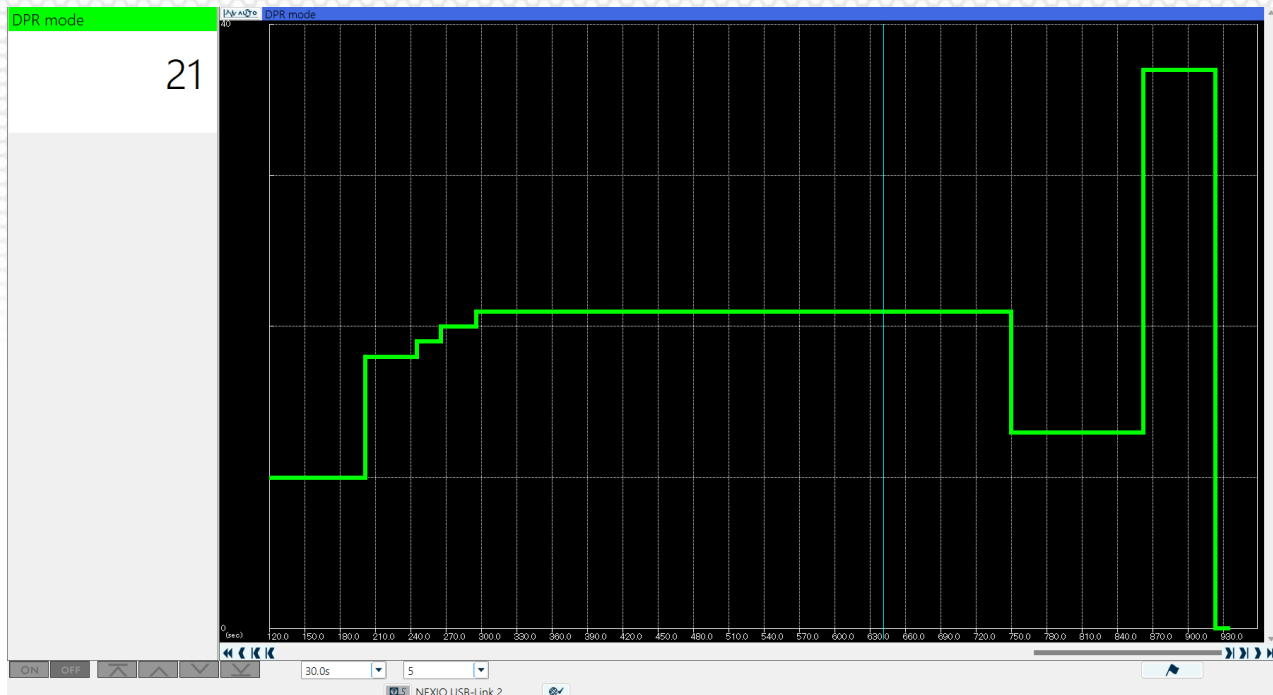
7. Click **Read**, click on the **Work Date** header a couple times to sort recordings by work date



8. Graph data to review. Temperature Sensors and Engine RPMs can be grouped together, other sensors are best reviewed and graphed individually.



9. Graph DPR Mode on its own



Regeneration Modes

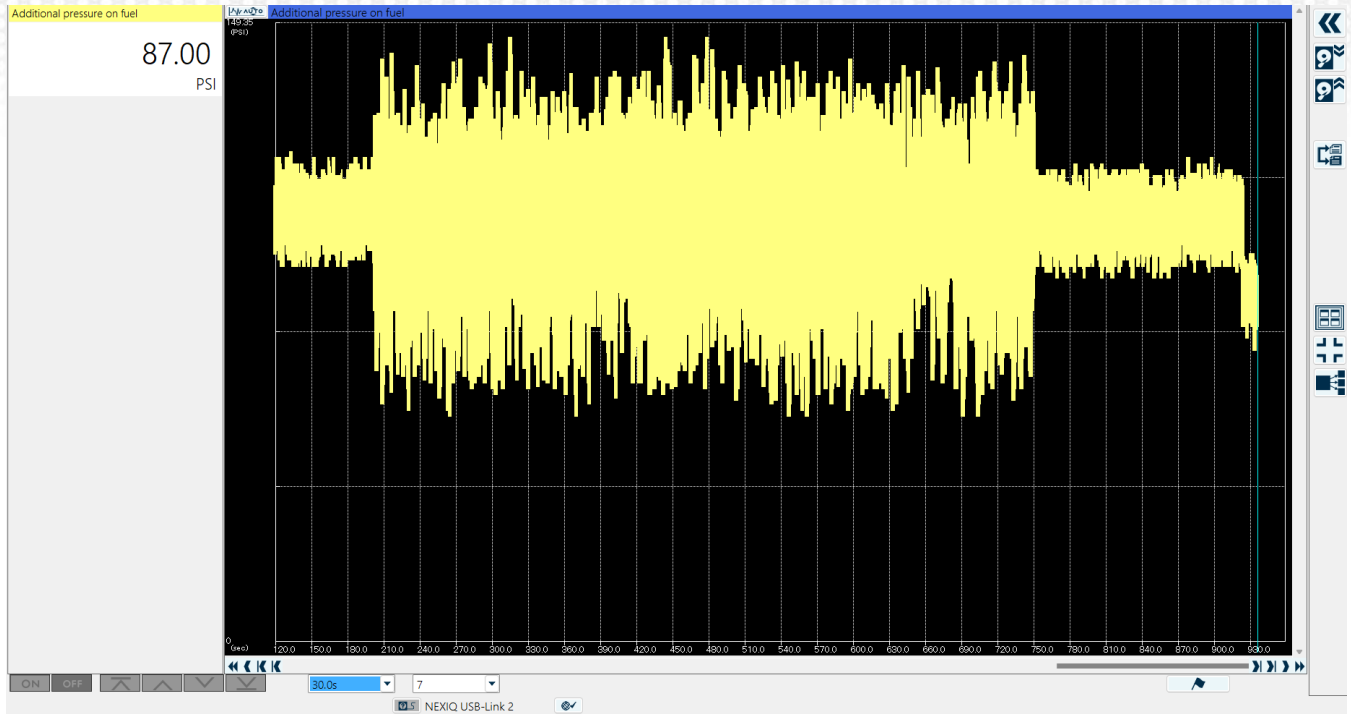
Parameters/Injection Type		After-Injection		Post-Injection								Post-Injection and Fuel Additive Injector							
Temps	DOC Inlet Sensor			Below 260 °C EGR Normal				Below 260 °C EGR Valve Stuck				Above 260 °C EGR Normal				Above 260 °C EGR Valve Stuck			
	ATC Sensor	Below 230 °C	Above 230 °C	→															
	DPR Filter Inlet Sensor	Below 200 °C		T1	T2	T3	*	T1	T2	T3	*	T1	T2	T3	*	T1	T2	T3	*
Mode	Active Regen	2	4	5	6	7	8	25	27	28	29	14	15	16	17	22	23	24	25
	EGR Valve	Closed		Varies with Driving Pattern				Closed				Varies with Driving Pattern				Closed			
	Throttle Valve																		
	Exhaust Brake	Open		Open				Open								Open			
Mode	Manual Regen	3	9	10	11	12	13	10	11	12	13	18	19	20	21	18	19	20	21
	EGR Valve	Closed		Closed				Closed				Closed				Closed			
	Throttle Valve																		
	Exhaust Brake	Closed		Closed				Closed				Closed				Closed			

T1, T2, and T3 are preliminary target temperatures

* DPR Filter Regeneration Temperature

GMV219

10. Graph Additional Pressure on Fuel on its own



Note: Please review our DX3 training course as needed for any graphing questions

Note: If you are not able to determine judgment, please follow **TechTip #22-019 Sending DX3 Files to TechAssist**. Create a TechAssist case outlining the customers concern, diagnosis performed and related DTC's, then attach file(s) for review.

