maximatecc.



maxAI Configuration Software V2.3.X.X Installation and Operation Manual

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1 Scope and Use of This Manual

... provide the reader with enough background information to understand the overall installation and operation of the maxAI 430iv configuration software...

The intent of this manual is to provide the reader with all the information required to install and operate the maxAI 430iv configuration software.

The user is expected to have a basic knowledge of the vehicle's operating parameters normally displayed on an instrument cluster, such as engine RPM, vehicle speed, engine temperature, transmission temperature, engine oil pressure, transmission oil pressure, etc.

maxAI 430iv Configuration Software allows the user to configure the maxAI 430iv display via a user friendly, easy to operate PC interface. The software allows the user to modify and configure up to 5 screens with a maximum of 5 parameters per screen.

Once configuration is set on the software, the new configuration is transferred to the display by USB or Bluetooth connection.

2 Installation Instructions

2.1 System Requirements

Component	Recommended	Minimum
Processor	Intel Compatible (x86)	Intel Compatible (x86)
	>2GHz	>1GHz
	>2 Cores	>2Cores
Memory(RAM)	8G	4GB
Hard drive capacity	>100GB	Defined by OS minimum
USB	2.0 or 3.0	1.1
Operating System	Windows 10 (>Version 1	709)

2.1 PC Tool Application Installation

PC Tool Application can be downloaded from the following link:

https://www.maximatecc.com/products/maxai-430i-advanced-instrumentation/

un-compress **SetupAdvancedClusterPCTTool V2.2.1.0.zip** file and run **setup.exe** with administrator rights.



Click Next.

🛃 Maximatecc maxAl430 V2	.2.1.6	(<u>/~)</u>)		×
License Agreemen	t			
92260		maxin	nate	ecc
Please take a moment to read t	he license agreement now. If you	accept the terms b	elow, clici	<''I
Agree", then "Next". Utherwise	eclick "Lancel".			
End-User License A	greement (EULA) of ma	xAI TM Config	g Tool	^
This End-User License you and MAXIMATEC	Agreement ("EULA") is a leg C	gal agreement b	etween	
This EULA agreement g Config Tool software (indirectly through a MA "Reseller").	governs your acquisition and "Software") directly from M XIMATECC authorized res	l use of our max IAXIMATECC eller or distribut	KAI TM or or (a	~
O I Do Not Agree				
	< <u>B</u> ack	<u>N</u> ext >	Canc	el

Select I agree and click Next.

🛃 Maximatecc maxAl430 V2.2.1.6	(<u>(11)</u>)		×
Welcome to the Maximatecc maxA Setup Wizard	1430 V2.2.1.6	nate	ecc
The installer will guide you through the steps required to in your computer.	nstall Maximatecc maxAI43	80 V2.2.1.I	6 on
WARNING: This computer program is protected by copyr Unauthorized duplication or distribution of this program, or or criminal penalties, and will be prosecuted to the maximu	ight law and international t any portion of it, may resu Im extent possible under th	reaties. It in sever ne law.	e civil
< <u>B</u> ack	<u>N</u> ext >	Cano	el

Click Next.

elect Installation Folder			
m	axin	nate	ec
e installer will install Maximatecc maxAI430 V2.2.1.6 to the following fold	er.		
install in this folder, click "Next". To install to a different folder, enter it b	elow or c	lick "Brow	se".
			5,807
<u>F</u> older:			
C:\Program Files\Centro Motion\Maximatecc maxAI430 V2.2.1.6\		Browse	
	<u>C</u>	lisk Cost	2
	<u>[</u>	<u>)</u> isk Cost	:
Install Maximatecc maxAI430 V2.2.1.6 for yourself, or for anyone who us	es this co	<u>o</u> isk Cost mputer:	:
Install Maximatecc maxAI430 V2.2.1.6 for yourself, or for anyone who us	es this co	jisk Cost mputer:	:
Install Maximatecc maxAI430 V2.2.1.6 for yourself, or for anyone who us O Everyone	es this co	2isk Eost	
Install Maximatecc maxAl430 V2.2.1.6 for yourself, or for anyone who us OEveryone Just me	E this co	isk Cost	

The installer will choose a default folder location. Click on **Browse** if you wish to choose an alternate location. Select the users that will have access to the software by selecting **Everyone** or **Just me**. Click **Next** to continue.

Maximatecc maxAl430 V2.2.1.6		(<u>///)</u> (×
Confirm Installation				
		maxir	nate	ecc
The installer is ready to install Maximatecc maxAI430	– V2.2.1.6 on y	our computer.		
Click "Next" to start the installation.				
< Bac	k T	Next>	Cano	cel
		How	Cark	

Click Next.

Maximatecc maxAl430 V2.2.1.6		(<u>111)</u>)		×
Customer Information				
		maxin	nate	ecc
nter your name in the box below. The in	nstaller will use this inf	ormation for subseque	nt installa	tions
N <u>a</u> me:				
maximateco				
	< <u>B</u> ack	<u>N</u> ext >	Canc	el

Enter your name into the box, then click **Next**.

Haximatecc maxAl430 V2.2.1.6			(<u>/**</u>)		×
Installing Maximatecc r	maxAI430 V	2.2.1.6			
		m	axin	nate	202
Maximatecc maxAI430 V2.2.1.6 is beir	ng installed		CIAI		
Please wait					_
	-	_			
	< <u>B</u> ack	Nex	ť>		

Wait while installation process is completed.



Click **OK** on the following pop-up.

🕼 Maximatecc maxAl430 V2.2.1.6	9 <u>(**)</u> 9		×
Installation Complete			
<u>.</u>	maxin	nate	ecc
Maximatecc maxAl430 V2.2.1.6 has been successfully installed.			
Click "Close" to exit.			
Please use Windows Update to check for any critical updates to the	e .NET Framewo	ork.	
≪≞ack	Close	Cano	cel

When progress has finished, click **Close** to complete installation.



Go to folder where the software was installed and double click the **Advanced Cluster PCTool maxAI430i** file or click the icon installed on the PC desk top to open the PC Tool Application.

Getting Started 3

3.1 **Required Hardware**

The Configuration Software speaks to the maxAI display via USB cable for configuration and firmware update or Bluetooth for configuration only. In addition to the maxAI display, the following items are required for display configuration.

Connect PC→USB→maxAI Display Connect Power Supply→maxAI Display



PC with Software



Adapter Harness/Power Supply



USB Cable

4 Communication

4.1 Connecting with USB



After connecting all hardware with a USB cable and opening Configuration software, establish USB communication by first selecting the model being connected then selecting **USB** under **Communications**.



Once the appropriate selections are made select Initialize at the top of the window.



Once communication is established, a pop up will confirm successful connection to the device and the Config Tool will indicate that it is connected at the top of the window.

4.2 Connecting with Bluetooth



Before making a USB connection, you may wish to change the **BLE Name** (Bluetooth Name) of the device. In order to change the name of the device, you will need to initially connect via USB. Once USB communication is established, rename the BLE Name to desired designation.



Once the BLE Name is filled in, select Write to set the new BLE Name to the device.



Once the BLE Name is known you are ready to connect via Bluetooth. To connect, first make sure the BLE Name is correct to match the device you wish to connect to. Once the BLE Name is correctly filled in, select the model being connected then selecting **Bluetooth** under **Communications**.



Once the appropriate selections are made select Initialize at the top of the window.



Once communication is established, a pop up will confirm successful connection to the device and the Config Tool will indicate that it is connected at the top of the window.

5 Configuration Software Navigation

The configuration Software is broken down into 2 tabs with options or sub tabs under each item as follows:

- 1. Settings
 - Cluster
 - Model
 - Custom Parameters
 - Clock
 - Synchronize
 - Time
 - Date
 - International
 - Language (can be added at customer request)
 - Units
 - Service Interval
 - Enable
 - Hours
 - Travel Distance
 - Odometer/Hours
 - Low Resolution
 - High Resolution
 - Frequency
 - a) PPM
 - Hours RTC
 - Communication
 - USB/Bluetooth
 - CAN Baud Rate Channel 0
 - CAN Baud Rate Channel 1
 - BLE Name
 - Cluster Name
 - Address
 - Cluster Address
- 2. Setup
 - Configure Display
 - Splash
 - a) Customer Splash Image
 - b) Display Time
 - Icons
 - a) Apply Icons

- Screen 1-Screen 5
 - a) Cluster Layout
 - a. Enable
 - b) Show Options
 - a. Conf Screen Timeout
 - b. Autoswitch Theme by Light Sensor
 - c. Transmission Position Display
 - d. Loss of Communication
 - e. Popup Banner
- Video
 - a) Video Display
 - a. Enabled
 - b) Video Switch Options
 - a. Signal
 - b. Source
 - c. On
 - d. Units
- Inputs
 - Digital
 - a) Add
 - b) Remove
 - Resistance
 - a) Part Number
 - b) Add
 - c) Remove
 - Voltage
 - a) Part Number
 - b) Add
 - c) Remove
 - Frequency
 - a) Add
 - b) Remove
 - Current
 - a) Add
 - b) Remove
- Gauge Sources
 - Signal Name
 - Source
 - Display LO-Limit
 - Display HI-Limit
 - Units
- Warning Lights
 - LED

- a) Signal Name
- b) Source
- c) Threshold-Lo
- d) Threshold-Hi
- e) Units
- f) Enable
- g) Logic
- LCD
 - a) Signal Name
 - b) Source
 - c) Threshold-Lo
 - d) Threshold-Hi
 - e) Units
 - f) Enable
 - g) Logic
- Output
 - Type
 - Activated by
- Cluster Config
 - PC File
 - Cluster
 - Firmware

6 Session Start



License: Shows software activation type

New: Start a session with defaults in all tool control's fields

Restore: Permits recover previous configuration when tool is closed and reopened

7 Setting Up Display Configuration

7.1 Settings

The Settings tab will allow you to set basic display functions.



Cluster Parameters menu allows you to view and adjust communication parameters for specific models.

Clock menu allows the setting of the time and date. This can be set manually by using the up and down arrows for time and the calendar drop down for date. The time and date can also be automatically set by selecting **Synchronize**. This will set time and date to the values on the PC.

International menu allows you to change the units of measure. The options are Imperial, Metric KPa, or Metric Bar. Future software releases will include the option to change language.

Service Interval menu allows you to set service time intervals for both Hours or Travel Distance. To enable this feature, Enable must be selected and value set. Select the parameter then select the value from the drop down.

Odometer/Hours menu

The Odometer and the hour meter can be configured to use CAN J1939 signals or input 4 configured as frequency input. The user shall configure the input 4 as a frequency counter (Setup: Inputs) and then Assigned to Vehicle Speed Gauge (Setup: Gauge Sources) then the frequency checkbox will be enabled, and the PPM (pulses per mile) text box will be available.

Cluster	Clock	International	Service Interval	Odometer/Hrs	Communication	BLE Name
Madal	C Supebraniza		🗹 Enable	O Lo Resolution	USB 🗸 🗸 🗸	maxAl12345678
Model	Synchronize	Language	1 Carrier	O Hi Resolution	CAN BaudRate	Address
maxAl430iv 🗸	2:59 PM 😫	English 🗸	 Hours 	Frequency	Channel 1	Cluster
Custom		Units	O Travel Distance	Input 4	250Kbps \sim	17
Parameters	07-20-21	Imperial V	3000 ~ Hrs	PPM 3,000 🖨	Channel 2	
AU DOMODIUM					250Kbps ∨	

The Hour meter have the Real time clock configuration available, during this mode the hour meter will count the time from the RTC internal module. The trigger for this counter will be the RPM value from the input 1 configured as tachometer input.

Communication menu allows you to set the Baud Rate independently for each CAN Channel necessary for the system the maxAI 430iv will be used on.

7.2 Cluster Custom Parameters



Select Parameters on the Settings tab.

Number	Signal	SPN	Source Address	Display Lo-Limit	Dis Hi-	play Limit Un	its		
1	Fuel1	96	0	0	100	%			
2	DEFLevel	1761	0	0	100	%			
3	IntakeMan	105	0	-41	210	0°			
4	EngOil	100	0	0	862	KPa	i		
5	BrakeSec	118	0	0	552	KPa	()		
6	BrakePri	117	0	0	552	KPa	i.		
7	TransOil	127	0	0	400	IO KPa	1		
8	EngCool	110	0	-41	210)°C			
9	EngOil1	175	0	-273	173	4 °C			
10	AuxTemp1	441	0	-41	210)"C			
 PGN	SPI	V Position	SPN	Signal		SPN Name	SPN	SPN Length	c
PGN	SPI in P	N Position GN	SPN	Signal		SPN Name	SPN Description	SPN Length	s
PGN 0	SPI in P 4	V Position GN	SPN 518	Signal Engine R	equeste	SPN Name Engine Requeste.	SPN Description . Parameter provid	SPN Length	S
 PGN 0 0	SPI in P 4 2-3	N Position GN	SPN 518 898	Signal Engine R Engine R	equeste	SPN Name Engine Requeste. Engine Requeste.	SPN Description . Parameter provid . Parameter provid	SPN Length 1 2	S byl
 PGN 0 0 0	SP1 in P 4 2-3 6.1	N Position GN	SPN 518 898 4191	Signal Engine R Engine R Engine R	equeste equeste	SPN Name Engine Requeste. Engine Requeste. Engine Requeste.	SPN Description . Parameter provid . Parameter provid . This parameter di	SPN Length 1 2 4	S by by
PGN 0 0 0 256	SP1 in P 4 2-3 6.1 2	N Position GN	SPN 518 898 4191 684	Signal Engine R Engine R Engine R RqstQutc	equeste equeste equeste h	SPN Name Engine Requeste. Engine Requeste. Engine Requeste. Requested Perce.	SPN Description Parameter provid Parameter provid This parameter di Parameter which	SPN Length 1 2 4 1	S byl byl bit:
PGN 0 0 256 34048	SP in P 4 2-3 6.1 2 1	N Position GN	SPN 518 898 4191 684 6730	Signal Engine R Engine R Engine R RqstCluto Engine R	equeste equeste equeste h m 2 Re	SPN Name Engine Requeste. Engine Requeste. Engine Requeste. Requested Perce. Engine Fan 2 Re	SPN Description Parameter provid Parameter provid This parameter di Parameter which Fan speed of the	SPN Length 1 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SI byt bits byt
PGN 0 0 256 34048 34048	SPI in P 4 2-3 6.1 2 1 2 1 2	N Position GN	SPN 518 898 4191 684 6730 6874	Signal Engine R Engine R Engine R RqstCluto Engine R Performar	equeste equeste equeste h in 2 Re ince Bias	SPN Name Engine Requeste. Engine Requeste. Engine Requeste. Requested Perce. Engine Fan 2 Re Performance Bias.	SPN Description Parameter provid Parameter provid This parameter di Parameter which Fan speed of the Indicates the ope	SPN Length 1 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SI byt bits byt byt
PGN 0 0 256 34048 34048 34048	SPI in P 4 2-3 6.1 2 1 2 5	V Position GN	SPN 518 898 4191 684 6730 6874 7438	Signal Engine R Engine R Engine R RqstCluto Engine Fa Performar Predictive	equeste equeste equeste h in 2 Re ince Bias Cruise	SPN Name Engine Requeste. Engine Requeste. Engine Requeste. Requested Perce. Engine Fan 2 Re Performance Bias. Predictive Cruise .	SPN Description Parameter provid Parameter provid Parameter which Fan speed of the Indicates the ope Maximum speed i	SPN Length 1 2 4 1 1 1 1 1	Si byt bits byt byt byt
PGN 0 0 256 34048 34048 34048 34048	SPI in P 4 2-3 6.1 2 1 2 5 6	N Position GN	SPN 518 898 4191 684 6730 6874 7438 7439	Signal Engine R Engine R RatCluto Engine R Performan Predictive Predictive	equeste equeste h in 2 Re ice Bias cruise Cruise	SPN Name Engine Requeste. Engine Requeste. Requested Perce. Engine Fan 2 Re Performance Bias. Predictive Cruise .	SPN Description Parameter provid Parameter provid Parameter du Parameter which Fan speed of the Indicates the ope Maximum speed Maximum speed	SPN Length 1 2 4 1 1 1 1 1 1 1 1 1	SI byt byt byt byt byt byt
PGN 0 0 256 34048 34048 34048 34048 34048 34048	SPI in P 4 2-3 6.1 2 1 2 5 6 3-4	V Position GN	SPN 518 898 4191 684 6730 6874 7438 7439 6715	Signal Engine R Engine R Engine R RqstCluto Engine R Performa Predictive Predictive Engine G	equeste equeste equeste h in 2 Re ice Bias Cruise cruise sseous	SPN Name Engine Requeste. Engine Requeste. Engine Faqueste. Engine Fan 2 Re Performance Bias. Predictive Cruise Engine Gaseous	SPN Description Parameter provid Parameter provid Parameter du Parameter du Parameter du Parameter du Parameter du Maximum speed Maximum speed Desired gage pre	SPN Length 1 2 4 1 1 1 1 1 1 2	SI byt byt byt byt byt byt byt

The Custom Parameters Selection window will open, the default section is Gauges.

uge	s Sources									
	Number	Signal	SPN	Source Address	Display Lo-Limit	Dis Hi-	play Un Limit	its		
	1	fuel1	96	0	0	100	%			
	2	DEFLevel	1761	0	0	100	%			
	3	IntakeMan	105	0	-41	210	°C			
	4	EngOil	100	0	0	862	KPa	i.		
	5	BrakeSec	118	0	0	552	KPa	i		
	6	BrakePri	117	0	0	552	KPa	1		
	7	TransOil	127	0	0	400	0 KPa	1		
	8	EngCool	110	0	-41	210	°C			
	9	EngOil1	175	0	-273	173	4 °C			
ls 8	10 ges & PGNs	Aux Temp 1	441	0	-41	210	2 0	(The Repla	ce 🍤 Defaults	°C, Up
iu <u>c</u> Is 8	10 ges & PGNs PGN	Aux Temp 1	441	0 SPN	-41 Signal	210	SPN Name	Repla SPN Description	ce 🕤 Defaults SPN Length	S Up
lu <u>c</u>	10 ges & PGNs PGN	Aux Temp 1	441	0 SPN 518	-41 Signal	210	SPN Name	Repla SPN Description Parameter provid.	ce 🕤 Defaults SPN Length	SF Up
lu <u>c</u> Is 8	10 ges & PGNs PGN 0 0	Aux Temp 1	441 N Position GN	0 SPN 518 898	-41 Signal	equeste	SPN Name Engine Requeste.	Repla SPN Description Parameter provid Parameter provid	ce Defaults SPN Length 1 2	Si Up
lu <u>c</u>	10 44 8 PGNs PGN 0 0 0 0	Aux Temp 1 SP in F 4 2-3 6.1	441 N Position GN	0 SPN 518 898 4191	-41 Signal Engine Re Engine Re Engine Re	210	SPN Name Engine Requeste. Engine Requeste.	Repla SPN Description Parameter provid Parameter d	SPN Length	SF byte bits
lu <u>c</u> Is 8	10 ges & PGNs PGN 0 0 0 0 256	SP in F 4 2-3 6.1 2	441 ATT N Position GN	0 SPN 518 898 4191 684	-41 Signal Engine Re Engine Re Engine Re ResClutci	210 squeste squeste	SPN Name Engine Requeste. Engine Requeste. Engine Requeste. Requested Perce.	Repla SPN Description Parameter provid This parameter di Parameter which	SPN Length	SF byte bits
lu <u>c</u>	10 ges 8 PGNs PGN 0 0 0 256 34048	Aux Temp 1 SP in F 4 2-3 6.1 2 1	441 ATT GN	0 SPN 518 898 4191 664 6730	41 Signal Engine Re Engine Re Engine Re RegretCited Engine Fa	equeste equeste h n 2 Re	C SPN Name Engine Requeste. Engine Requeste. Engine Requeste. Engine Requeste. Engine Fan 2 Re	Repla SPN Description Parameter provid Parameter provid Parameter which Fan speed of the	SPN Length 1 2 4 1 1 1	SF byte bits byte
lu c	10 44 9 PGNs 9 PGNs 0 0 0 256 34048 34048	SP in F 4 2-3 6.1 2 1 2	441 N Position GN	0 SPN 518 898 4191 684 6730 6874	41 Signal Engine Re Engine Re RastOutol Engine Ra RastOutol Performan	210 equeste equeste h n 2 Re ce Bias	C SPN Name Engine Requeste. Engine Requeste. Engine Requeste. Engine Fan 2 Re Performance Bias.	Repla SPN Description Parameter provid Parameter d Parameter d Parameter d Parameter which Fan speed of the Indicates the ope	SPN Length 1 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SF byto byto bits byto byto byto
lu <u>c</u>	10 9 8 PGNs PGN 0 0 0 256 34048 34048	AuxTemp1 SPF in F 4 2 1 2 1 2 5	441 N Position GN	0 SPN 518 898 4191 664 6730 6674 7438	41 Signal Engine Re Engine Re RastClutci Engine Ra Performan Predictive	210 squeste squeste h n 2 Re ce Bias Cruise	SPN Name Engine Requeste. Engine Requeste. Engine Requeste. Requested Perce. Engine Fan 2 Re Preformance Bias. Predictive Cruise .	Repla SPN Description Parameter provid Parameter provid Parameter provid Parameter which Parameter which Indicates the ope Indicates the ope Maximum speed	SPN Length 1 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SF byte byte bits byte byte byte byte
ls é	10 ges & PGNs PGN 0 0 0 256 34048 34048 34048	Aux Temp1 SP in F 4 2-3 6.1 2 1 2 5 6	441 N Position GN	0 SPN 518 898 4191 684 6730 6874 7438 7439	41 Signal Engine R Engine R R Status Engine R R RastClutci Engine Fa Performan Predictive Predictive	210 squeste squeste h n 2 Re ce Bias Cruise Cruise	SPN Name Engine Requeste. Engine Requeste. Engine Requeste. Engine Fan 2 Re Performance Blas. Predictive Cruise .	Repla SPN Description Parameter provid Parameter provid Parameter provid Parameter which Fan speed of the Indicates the ope Maximum speed Maximum speed	SPN Length SPN Length 1 2 4 1 1 1 1 1 1 1 1 1	SF byte byte byte byte byte byte
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The grey shaded cells can not be changed, but all white cells can be adjusted to user preferences.

	Number	Signal	SPN	Source Address	Display Lo-Limit	Display Hi-Limit	Units	^
1	1		6	0	0	100	%	
	2	DEFLevel	1761	0	0	100	%	
	3	IntakeMan	105	0	-41	210	°C	
	4	EngOil	100	0	0	862	KPa	
	5	BrakeSec	118	0	0	552	KPa	
	6	BrakePri	117	0	0	552	KPa	
	7	TransOil	127	0	0	4000	KPa	
	8	EngCool	110	0	-41	210	°C	
	9	EngOil1	175	0	-273	1734	°C	
	10	AuxTemp1	441	0	-41	210	°C	
	44	T 011	177	0	070	1704	00	×

Select the parameter to change by double clicking on the parameter cell. This will bring up a text cursor. The original parameter can then be deleted and new parameter filled in. The new designation will be limited to 10 characters.

igo	N I	C	CON	Source	Display	Dis	splay	11.3	2 P		
	Number	Signal	SPIN	Address	Lo-Limit	Hi-	Limit	Unit	s		
	1	FuelTank	96	0	0	100)	%			
	2	DEFLevel	1761	0	0	100)	%			
	3	IntakeMan	105	0	-41	210)	°C			
	4	EngOil	100	0	0	862	2	KPa			
	5	BrakeSec	118	0	0	552	2	KPa			
	6	BrakePri	117	0	0	552	2	KPa			
	7	TransOil	127	0	0	400	0	KPa			
	8	EngCoolant	110	0	-41	210)	°C			
	9	EngOil1	175	0	-273	173	14	°C			
ls	10 ges & PGNs	AuxTemp1	441	0	-41	210		°C	T Re	olace 🕤 Defaults	C UF
ls i	10 ges & PGNs PGN	AuxTemp1	441 Position	0 SPN	-41 Signal	210) SPN Name	°C	Re SPN Description	olace 🕤 Defaults SPN Length	S UF
ls	10 ges & PGNs PGN	AuxTemp1	441 Position	0 SPN 518	-41 Signal	210	SPN Name	ste	Re SPN Description Parameter provide	SPN Length	SF byt
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ls	10 ges & PGNs PGN 0 0 0	AuxTemp1 	441 Position 3N	0 SPN 518 898 4191	-41 Signal Engine Ret Engine Ret	ueste	SPN Name Engine Reque Engine Reque Engine Reque	ste	SPN Description Parameter provic Parameter provic This parameter descent	SPN Length 1 2 4	Sf byt bits
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Once all of the parameters are set to the user settings select **OK** to set the new parameters, or if you wish to cancel the changes select **Close**.

7.3 Gauges

Gody		Spectrum 1	1200205	Source	Dioniou	r)isnlav	View I			
	Number	Signal	SPN	Address	Lo-Limit	Ĥ	Aspiay A-Limit	Units			
•	1	Fuel1	96	0	0	10	00	%			
	2	DEFLevel	1761	0	0	1(00	%	_		
	3	IntakeMan	105	0	-41	2	10	°C	_		
	4	EngOil	100	0	0	86	52	KPa	-		
	5	BrakeSec	118	0	0	55	52	KPa	_		
	6	BrakePri	117	0	0	55	52	KPa	-		
	7	TransOil	127	0	0	40	000	KPa	_		
	8	EngCool	110	0	-41	2	10	°C			
	9	EngOil1	175	0	-273	17	734	°C	_		
	10	Aux Temp 1	441	0	-41	2	10	°C	_		
Gau SPNs	uges & PGINS	>							🕐 Repla	ce 🕤 Defaults	GU
	PGN	SP in F	N Position	SPN	Sig	nal	SPN Name		SPN Description	SPN Length	s
	0	4	un	518	Eng	ine Requeste	Engine Regue	orto	Parameter provid	1	hu
1	0	2.2		898	Eng	ine Requeste	Engine Regul	asta	Parameter provid	2	by
-	0	£-5		4191	Eng	ine Requeste	Engine Requi	acte	This parameter d	4	ba
-	256	0.1		684	Eng Ree	Clutch	Requested D	ance	Parameter which	1	but
-	34048	1		6730	Fee	ine Fan 2 Re	Engine Fan 2	Re	Fan speed of the	1	but
-	34048	2		6874	Parf	omance Pise	Performance	Riae	Indicates the one	1	but
	34048	5		7438	Pres	fictive Cnuise	Predictive Co	ise	Maximum speed i	1	by
	34048	6		7439	Prec	fictive Cruise	Predictive Co	ise	Maximum speed I	1	by
	34560	2.4		6715	Fre	ine Gaseoure	Engine Garee		Desired gage pre-	2	by
-	10100			0,10	ang ang			-	o i	-	- OY
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I Ron	w Count:208	neters S signal FuelTark DEFLevel IntakeMan EngOl BrakeSec BrakePri TransOl EngOlol AuxTemp1 AuxTemp1 4 2,3 6,1 2 1 2 5	Pelecti n 96 761 100 100 118 117 127 110 1175 441 175 441	On. Source Address 0 0 0 0 0 0 0 0 0 0 0 0 0	Display Lo-Lmit 0 0 41 0 0 0 0 0 0 0 41 -273 41 -273 41 -273 41 -273 -41 -273 -41 -273 -41 -273 -41 -273 -41 -273 -41 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -277 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -273 -411 -773 -411 -773 -411 -773 -774 -774 -774 -774 -774 -774 -774	nal Requeste. In Requeste. I	Display 4-Limit 200 201 201 22 22 22 22 22 22 22 200 10 23 24 10 25 24 10 25 25 25 25 25 25 25 25 25 25 25 25 25	Units % % KPa KPa KPa KPa C C C C C C C C C C C C C C C C C C S S S S S S S S S S S S S S S S S S S S	Repla SPN Description Parameter provid Parameter provid Parameter which Fan speed of the Indicates the ope Maximum speed I	Ce Defaults SPN Length 1 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <p< td=""><td>S Upport</td></p<>	S Upport
istor	w Count:208	neters S Signal FuelTank DEFLevel IntakeMan EngOil BrakeSec BrakePn TransOil BrakeSec BrakePn TransOil AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1 AuxTemp1	SPN 96 +751 100 118 117 127 110 118 117 127 110 118 117 127 110 118 117 127 110 118 117 127 110 100 118 117 127	On. Source Address 0 0 0 0 0 0 0 0 0 0 0 0 0	Display Lo-Umit 0 41 -273 41 -273 41 -273 41 -273 41 -273 41 -273 41 -273 41 -273 41 -273 41 -273 41 -273 41 -273 -41 -273 -41 -273 -41 -273 -41 -273 -41 -273 -273 -274 -275 -275 -275 -275 -275 -275 -275 -275 -275 -275 -275 <td< td=""><td>nal</td><td>Neplay H-Limit 30 30 30 52 52 52 52 52 52 52 52 52 52 52 52 52</td><td>Units % % KPa KPa KPa °C °C °C °C °C °C °C °C °C °C °C °C °C</td><td>Parameter provid Parameter provid Parameter provid Fan speed of the Fan spe</td><td>Close Defaults SPN Length 1 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</td><td>C Upper</td></td<>	nal	Neplay H-Limit 30 30 30 52 52 52 52 52 52 52 52 52 52 52 52 52	Units % % KPa KPa KPa °C °C °C °C °C °C °C °C °C °C °C °C °C	Parameter provid Parameter provid Parameter provid Fan speed of the Fan spe	Close Defaults SPN Length 1 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C Upper
Gaug	v Count:208	neters S Signal FuelTank DEFLevel IntakeMan EngOl BrakeSec BrakePri TransOl EngColat EngColat EngColat EngColat SPI in F 4 4 2.3 6.1 2 1 2 5 6 6 3.4	Peelecti n \$PN 96 761 105 117 110 117 117 110 117 110 117 1441 477 N Postion	On. Source Address 0 0 0 0 0 0 0 0 0 0 0 0 0	Display Lo-Juni 0 0 4-11 0 0 0 0 0 4-11 -273 -41 -273 -41 -273 -41 -273 -41 -273 -41 -273 -41 -273 -41 -273 -41 -273 -411 -273 -411 -273 -411 -274 -274 -274 -274 -274 -274 -274 -274	nal ine Requeste. ine Requeste. ine Requeste. ine Requeste. ine Raqueste. ine Raqueste. ine Raqueste. Cutch ine Fan 2 Re. omance Bias. Ective Cruise . ine Gaseous .	Seplay 4-Linkt 300 300 301 52 52 52 52 52 52 52 52 52 52 52 52 52	Units % % KPa KPa KPa KPa C °C °C °C °C °C °C °C °C °C °C °C °C °	Repla SPN Description Parameter provid Parameter provid Parameter provid Parameter which Fan speed of the Indicates the ope Maximum speed	Close Defaults SPN Length 1 2 4 1 1 1 1 2	C Up

Gauge Source information can also be updated by dragging the preferred SPN & PGN data from the **SPNs & PNGs** panel to the Gauge Source position desired in the **Gauge Source** panel.

aug	es Sources											
	Number	Signal	SPN	Sou Add	urce dress	Dis	splay i-Limit	Display Hi-Limit	Unit	s		
	1	FuelTank	96	0		0	1	00	%	0		
	2	RqstClutch	684	0		0	1	00	%			
	3	IntakeMan	105	0		-41	2	210	°C			
	4	EngOil	100	0		0	8	62	KPa			
	5	BrakeSec	118	0		0	5	52	KPa			
	6	BrakePri	117	0		0	5	52	KPa			
	7	TransOil	127	0		0	4	000	KPa			
	8	EngCoolant	110	0		-41	2	10	°C			
	9	EngOil1	175	0		-27	3 1	734	°C			
							5 C	S117				
Gau PNs	10 iges & PGNs	AuxTemp1	441	0		-41		70 4	°C	(The Repla	ce 🍤 Defaults	S Up
Gau PNs	10 ages & PGNs PGN	AuxTemp1	441	0	SPN	41	Signal	SPN Name	°C	Repla	ce 🅤 Defaults SPN Length	S Up
Gau	10 10 10 10 10 10 10 10 10 10	AuxTemp1	441 4 I Position 3N	0	SPN 90	-41	Signal Power Takeoff O	SPN Name	"C	Repla SPN Description Temperature of lu	ce 🕤 Defaults SPN Length	S Up SP
Sau	10 10 10 10 10 10 10 10 10 10	AuxTemp1	441 477 I Position GN	0	SPN 90 91	41	Signal Power Takeoff O AccPedal1	SPN Name	ff Oi	Repla SPN Description Temperature of lu The ratio of actu	ce Defaults SPN Length	S Up SP byte
Gau	10 10 14 10 10 10 10 10 10 10 10 10 10	AuxTemp1 SPN in P(1 2 3	I Position GN	9	SPN 90 91 92	41	Signal Power Takeoff O AccPedal1 EngLoad	SPN Name SPN Name Accelerator F Engine Perce	ff Oi Peda	Repla SPN Description Temperature of lu The ratio of actu The ratio of actu	Ce Defaults SPN Length	S Up
Gau	10 10 10 10 10 10 10 10 10 10	AuxTemp1 	441 177 I Position GN	0	SPN 90 91 92 94	41	Signal Power Takeoff O AccPedal1 EngLoad EngFuelDel	SPN Name SPN Name Accelerator F Engine Perce Engine Fuel	*C	Replain SPN Description Temperature of lu The ratio of actu Gage pressure of	SPN Length	SP SP byte byte
Gau	10 10 10 10 10 10 10 10 10 10	AuxTemp1 	441 1 Position GN	9	SPN 90 91 92 94 95	41	Signal Power Takeoff O AccPedal1 EngLoad EngFuelDel EngFuelPil	SPN Name SPN Name Accelerator F Engine Perce Engine Fuel Engine Fuel	ff Oi Peda Peliv Filter	Repla SPN Description Temperature of lu The ratio of actu The ratio of actu Change in fuel de	SPN Length 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SP SP byte byte byte
Gau	10 10 14 15 10 10 10 10 10 10 10 10 10 10	AuxTemp1 	I Position GN	0 0 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	SPN 90 91 92 94 95 96	41	Signal Power Takeoff O AccPedal1 EngLoad EngFuelDel EngFuelPil Fuel1	SPN Name SPN Name Accelerator F Engine Pere Engine Fuel Engine Fuel	ff Oi reda ent L Deliv Filter	Repla SPN Description Temperature of lu The ratio of actu Change in fuel de Change in fuel de	SPN Length 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SP SP byte byte byte byte
Gau	10 gges & PGNs PGN 65264 61443 61443 65263 65276 65276 65276 65263	Aux Temp1 	I Position GN	0 0 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	SPN 90 91 92 94 95 96 98	41	Signal Power Takeoff O AccPedal1 EngLoad EngFuelDel EngFuelDel EngFuelI EngOil	SPN Name SPN Name Accelerator F Engine Fuel Engine Fuel Engine Fuel Engine Fuel Engine Fuel Engine Fuel	ff Oi Peda ent L Deliv Filter	Repla SPN Description Temperature of lu The ratio of actu Gage pressure of Change in fuel de Ratio of volume o Ratio of volume t	SPN Length 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SP SP byte byte byte byte
Gau	10 10 14 10 14 10 14 15 16 14 14 15 16 14 14 15 16 14 14 16 14 14 16 14 14 16 16 16 16 16 16 16 16 16 16	Aux Temp1 SPN in P0 1 2 3 1 3 2 3 4	I Position GN		SPN 90 91 92 94 95 96 98 99 99	-41	Signal Power Takeoff O AccPedal1 EngLoad EngFuelDel EngGuelFil EngOil EngOil EngOilFilt	SPN Name SPN Name Accelerator F Engine Fuel Engine Fuel Fuel Level 1 Fuel Level 1 Engine Oil Le Engine Oil Fil	ff Oi reda reda Peda Filter vvel ter	Repla SPN Description Temperature of lu The ratio of actu Gage pressure of Change in fuel de Ratio of volume o Ratio of volume o Change in engine	SPN Length 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SP byte byte byte byte byte byte
Gau	10 10 10 10 10 10 10 10 10 10	AuxTemp1 SPN SPN 1 2 3 1 3 4 4 4	I Position GN		SPN 90 91 92 94 95 96 98 99 99 100	41	Signal Power Takeoff O AccPedal1 EngLoad EngFuelDel EngFuelDel EngOil EngOil EngOil	SPN Name SPN Name SPN Name Control SPN N	"C off Oi Peda int L Deliv iiter vel vel ter essure	Repla SPN Description Temperature of lu The ratio of actu The ratio of actu The ratio of actu The ratio of actu Ratio of current v Change in fuel de Ratio of current v Change in engine	SPN Length 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SP byte byte byte byte byte byte

Other shortcuts can be done using the parameter shortcut buttons.

	Number	Signal	SF	'N	Source Address	Dis Lo	splay -Limit	Display Hi-Limit	Unit	5		
	1	Fuel1	96		0	0	1	00	%			
	2	DEFLe	vel 176	51	0	0	1	00	%			
	3	Intake!	Man 105	j	0	-41	2	10	°C			
	4	EngOil	100)	0	0	8	62	KPa			
	5	BrakeS	ec 118	3	0	0	5	52	KPa			
	6	BrakeP	ri 117	7	0	0	5	52	KPa			
	7	TransO	127	1	0	0	4	000	KPa			
	8	EngCo	ol 110)	0	-41	2	10	°C			
	9	EngOil	175	i	0	-27	3 1	734	°C			
		100 C		_	0			10	10			
au Vs	10 iges & PGNs	AuxTer	SPN Po	sition	•	-41	2	70.4	<u>د</u>	The second secon	ace 🍤 Defaults	'G Up
au Vs	10 Iges & PGNs PGN	AuxTer	SPN Por in PGN	sition	SPN	-41	Signal	SPN Nam	le le	Repl SPN Description	ace 🕤 Defaults	S Up
a u Ns	10 iges & PGNs PGN 0	AuxTer	SPN Por in PGN	sition	SPN 518	-41	Signal Engine Requeste	SPN Nam	e queste	Repl SPN Description Parameter provid.	ace Defaults SPN Length . 1	S Up
au	10 Iges & PGNs PGN 0 0	AuxTer	SPN Por in PGN 4 2-3	sition	SPN 518 898	-41	Signal Engine Requeste Engine Requeste	SPN Nan	e queste	Repl SPN Description Parameter provid Parameter provid	SPN Length	SF byte
au	10 iges & PGNs PGN 0 0 0 0	AuxTer	SPN Po: in PGN 4 2-3 6.1	sition	SPN 518 898 4191	-41	Signal Engine Requeste Engine Requeste Engine Requeste	SPN Nam	e queste queste	Repl SPN Description Parameter provid Phis parameter di	SPN Length	SF Sf byt bits
au	10 iges & PGNs PGN 0 0 0 0 256	AuxTer	SPN Por in PGN 4 2-3 6.1 2	sition	SPN 518 898 4191 684	-41	Signal Engine Requeste Engine Requeste Engine Requeste RqstQutch	SPN Nam Engine Re Engine Re Engine Re Engine Re Requested	e queste queste I Perce	Repl SPN Description Parameter provid. Parameter d. Parameter which .	ace Defaults SPN Length 1 2 . 4 . 1	SF byte bits
au	10 iges & PGNs PGN 0 0 0 0 256 34048	AuxTer	SPN Por in PGN 4 2-3 6.1 2 1	sition	SPN 518 898 4191 684 6730	-41	Signal Engine Requeste Engine Requeste RgstOutch Engine Fan 2 Re	SPN Nam Engine Re Engine Re Engine Re Requested Engine Fa	e queste queste f Perce n 2 Re	Repl SPN Description Parameter provid Parameter provid Parameter di. Parameter di. Parameter di. Parameter di. Parameter di.	SPN Length 1 2 4 1 1 1	SF byte byte bits byte
au	10 Inges & PGNs PGN 0 0 0 256 34048 34048	AuxTer	SPN Po- in PGN 4 2-3 6.1 2 1 2	sition	SPN 518 898 4191 684 6730 6874	-41	Signal Engine Requeste Engine Requeste RaptCutch Engine Fan 2 Re Performance Bias	SPN Nam Engine Re Engine Re Engine Re Requested Engine Fa Performan	queste queste queste I Perce 1 2 Re ce Bias	Repl SPN Description Parameter provid. Parameter provid. This parameter d. Parameter which. Parameter which. Indicates the ope. Indicates the ope.	SPN Length 1 2 4 1 1 1 1 1 1	SF byte bits byte byte
au	10 19 8 PGNs PGN 0 0 0 256 34048 34048	AuxTer	SPN Po- in PGN 4 2-3 6.1 2 1 2 5	sition	SPN 518 898 4191 684 6730 6874 7438	-41	Signal Engine Requeste Engine Requeste Engine Requeste RgstOuch Engine Fan 2 Re Performance Bia Predictive Cruise	SPN Nam Engine Re Engine Re Requester Engine Fa Requester Performan Predictive	queste queste queste I Perce 1 2 Re ce Bias Cruise	Repl SPN Description Parameter provid Parameter provid. This parameter di. Parameter which . Fan speed of the Indicates the ope. Maximum speed i.	SPN Length 1 2 4 1 1 1 1 1 1 1 1 1 1 1	SF byto byto bits byto byto byto
au Vs	10 19 8 PGNs PGN 0 0 0 0 256 34048 34048 34048	AuxTer	SPN Poo in PGN 4 2-3 6.1 2 5 6	sition	SPN 518 898 4191 684 6730 6874 7438 7439	41	Signal Engine Requeste Engine Requeste Engine Requeste RatOutch Engine Fan 2 Re Predictive Cruise Predictive Cruise	SPN Nam SPN Nam Spn Re Figure Re Figure Re Requester Figure Re Performan Predictive Predictive	e queste queste I Perce n 2 Re ce Blas Cruise Cruise	Repl SPN Description Parameter provid. Parameter provid. Parameter di. Parameter di. Parameter di. Parameter di. Maximum speed i. Maximum speed i.	SPN Length 1 2 4 1 1 1 1 1 1 1 1 1	SF byte bits byte byte byte byte
au	10 19 8 PGNs PGN 0 0 0 256 34048 34048 34048 34048	AuxTer	SPN Por in PGN 4 2-3 6.1 2 5 5 6 3-4	sition	0 SPN 518 898 4191 684 6730 6874 6874 6874 7438 7439 6715	41	Signal Engine Requeste Engine Requeste Engine Requeste RgtClutch Engine Fan 2 Re Performance Bias Predictive Cruise Engine Gaseous	SPN Nan Engine Re Engine Re Reguester Engine Fa S Performan Predictive Ingine Ga	queste queste queste 1 Perce 1 Perce ce Blas Cruise Cruise seous	Repl SPN Description Parameter provid. Parameter provid. Parameter di. Parameter which. Parameter which. Parameter which. Parameter which. Mainum speed I. Maximum speed I. Maximum speed J. Maximum speed J.	SPN Length 1 2 4 1 1 2 4 1 1 2	SF byte bits byte byte byte byte byte

To replace a selection in the **Gauge Sources** panel with a selection from the **SPNs & PGNs** panel using the buttons, first select the gauge number to be replaced in the **Gauge Sources** panel and then select the desired row from the **SPNs & PGNs** panel.

ladig	es Sources			110000	11-20 W					
	Number	Signal	SPN	Source Address	Display Lo-Limit	Display Hi-Limit	Unit	s		
	1	Fuel1	96	0	0	100	%			
	2	DEFLevel	1761	0	0	100	%			
	3	IntakeMan	105	0	-41	210	°C			
	4	EngOil	100	0	0	862	KPa			
0	5	BrakeSec	118	0	0	552	KPa			
	6	BrakePri	117	0	0	552	KPa			
	7	TransOil	127	0	0	4000	KPa			
	8	EngCool	110	0	-41	210	°C			
	9	EngOil1	175	0	-273	1734	°C			
	10	Aux Temp 1	441	0	-41	210	°C			
Gau	iges & PGNs	•	N.D					Repla	ce 🕤 Defaults	C, Up
Gau	eges & PGNs PGN	• SF	'N Position PGN	SPN	Signal	si	PN Name	Repla SPN Description	ce 🕤 Defaults SPN Length	C, Up
Gau	eges & PGNs PGN 65274	- SF in 3	N Position PGN	SPN 118	Signal BrakeSec	SI	PN Name ake Secondary	Repla SPN Description Gage pressure of	Ce Defaults SPN Length	SF
Gau	99es & PGNs PGN 65274 65276	SF in 3 7	N Position PGN	SPN 118 38	Signal BrakeSec Fuel1	SI Bra	PN Name ake Secondary el Level 2	Repla SPN Description Gage pressure of Ratio of volume o	ce Defaults SPN Length	SF
Gau	ges & PGNs PGN 65274 65276 65276	• SF in 3 7 1	N Position PGN	SPN 118 38 80	Signal BrakeSec Fuel1 WashRuid	SI Bra Fu Wa	PN Name ake Secondary el Level 2 asher Fluid Level	Repla SPN Description Gage pressure of Ratio of volume o Ratio of volume o	Ce Defaults SPN Length	SF
Gau SPNs	PGN 65274 65276 65276 65276	• SF in 3 7 1 3	N Position PGN	SPN 118 38 80 95	Signal BrakeSec Fuel1 WaahRuid EngFuelFil	SI Bra Fur Wa En	PN Name ake Secondary el Level 2 asher Fluid Level igine Fuel Filter	Repla SPN Description Gage pressure of Ratio of volume o Ratio of volume o Change in fuel de	SPN Length	SF
Gau	PGN 8 PGNs PGN 65274 65276 65276 65276 65276 65276	• SF in 3 7 1 3 2	N Position PGN	SPN 118 38 80 95 96	Signal BrakeSec Fuel1 WashRuid EngFuelFil Fuel1	SI Bra Fu Wa En Fu	PN Name ake Secondary el Level 2 asher Fluid Level Igine Fuel Filter el Level 1	Repla SPN Description Gage pressure of Ratio of volume o Ratio of volume o Ratio of volume o Ratio of volume o	SPN Length	SF SF byte byte byte byte
Gau 6PNs	PGNs PGN 65274 65276 65276 65276 65276 65276 65276 65276 65276 65276	• SF in 3 7 1 3 2 4	N Position PGN	SPN 118 38 80 95 96 99	Signal BrakeSec Fuel1 WashFluid EngFuelFli Fuel1 EngOilFlit	SI Bra Fu Wa En Fu En	PN Name ake Secondary el Level 2 asher Fluid Level gine Fuel Filter el Level 1 ugine Oil Filter	Repla SPN Description Gage pressure of Ratio of volume o Ratio of volume o Ratio of volume o Ratio of volume o Change in regine	SPN Length 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SF byte byte byte byte byte
Gau	PGN 65274 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276	 SF In 3 7 1 3 2 4 5-6 	N Position PGN	SPN 118 38 80 95 96 99 169	Signal BrakeSec Fuel1 WashFluid EngFuelFli Fuel1 EngOtFlit CargoAmb	SI Bra Fu Wa En Fu En Ca	PN Name ake Secondary el Level 2 asher Fluid Level gine Fuel Filter el Level 1 ıgine Oil Filter ırgo Ambient T	Repla SPN Description Gage pressure of Ratio of volume o Ratio of volume o Change in fuel de Ratio of volume o Temperature of ai Temperature of ai	SPN Length 1 1 1 1 1 1 2	SF byte byte byte byte byte
Gau	ges & PGNs & PGNs & PGNs & PGNs & 65274 & 65276 & 65276 & 65276 & 65276 & 65276 & 65276 & 65276 & 65276 & 65276 & 65276 & 65276 & 65275 & 65275 & 65275 & 65279 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 &	 SF in 3 7 1 3 2 4 5-6 3-4 	N Position PGN	SPN 118 38 80 95 96 99 169 8428	Signal Brake Sec Fuel1 Wash Ruid Eng FuelRil Fuel1 Eng Oil Rit Cargo Amb Fuel Supply E	SI Bra Fu En Fu En Ca istim Fu	PN Name ake Secondary el Level 2 asher Fluid Level gigne Fuel Filter el Level 1 gigne Oil Filter rigo Ambient T el Supply Estim	Repla SPN Description Gage pressure of Ratio of volume o Change in fuel de Ratio of volume o Change in engine Entimated remaini Estimated remaini	SPN Length 1 1 1 1 1 1 2 2 2	SF byte byte byte byte byte byte
Gau 5PNs	ges & PGNs PGN 65274 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65274 65276 65274 65274 65274 65274 65274 65274 65274 65274 65275 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276	 SF n 3 7 1 3 4 5-6 3-4 	N Position PGN	SPN 118 38 80 95 96 99 169 8428	Signal BrakeSec Fuel1 WashFluid EngFuelFli Fuel1 EngOl/Fit CargoAmb Fuel Supply E	SI Bra Fu En Fu En Ca istim Fu	PN Name ake Secondary el Level 2 asher Fluid Level gjine Fuel Filter el Level 1 ugine Oil Filter rgo Ambient T el Supply Estim	Repla SPN Description Gage pressure of Ratio of volume o Ratio of volume o Change in field de Temperature of ai Estimated remaini	SPN Length SPN Length 1 1 1 1 2 2 2	SF byte byte byte byte byte byte byte
Gau SPNs	ges & PGNs PGN 65274 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276	SF m 3 7 1 3 2 4 5 6 3 4	N Position PGN	SPN 118 38 80 95 96 99 169 8428	Signal BrakeSec Fuel1 WashFluid EngFuelFl Fuel1 Fuel2 Supply E	Si Bra Fu Wa En Fu En Ca istim Fu	PN Name ake Secondary el Level 2 asher Fluid Level gjine Fuel Filter el Level 1 gjine Oil Filter rgo Ambient T el Supply Estim	Repla SPN Description Gage pressure of Ratio of volume o Ratio of volume o Ratio of volume o Change in fuel de Ratio of volume o Temperature of ai Estimated remain	Ce Defaults SPN Length 1 1 1 1 1 1 2 2 2	SF byte byte byte byte byte

Custom PGN's can be set up by scrolling to the botton of **SPN's & PGN's** where a blank row is available. Each cell in the row must be filled out in order for the custom PGN to be saved.

	Number	Signal	SPN	Source Address	Display Lo-Limit	Disp Hi-L	olay Jimit	Units	1			
	1	Fuel1	96	0	0	100		%				
	2	DEFLevel	1761	0	0	100		%				
	3	IntakeMan	105	0	-41	210		°C				
	4	EngOil	100	0	0	862		KPa				
	5	BrakeSec	118	0	0	552	1	KPa				
	6	BrakePri	117	0	0	552		KPa				
	7	TransOil	127	0	0	4000)	KPa				
	8	EngCool	110	0	-41	210		°C				
	9	EngOil1	175	0	-273	1734	t i	°C				
	10	AuxTemp1	441				0			_		
au Is	iges & PGNs	• • • • •	V Position	Error	ropietary PGNs Nur	nbers shou	uld be grater	than 6	5280 ×) Replac	e 🕤 Defaults	'G Up
au Vs	ages & PGNs PGN	sPi	V Position GN	Error	ropietary PGNs Nur	nbers shoi	uld be grater	than 6	5280	Replac	e 🕤 Defaults	S Up
au Ns	A PGNs PGN 65274	sPl in F 3	N Position GN	Error	ropietary PGNs Nur	nbers shoi	uld be grater	than 6 C	5280 5K	Replac	SPN Length	S Up
au Is	PGN 65274 65276	SPI in F 3 7	N Position GN	Error P	ropietary PGNs Nur Fuel1	nbers sho	uld be grater	than 6 C	5280 K Ratio of V	Replac	SPN Length	S Ur Si byt
au Vs	PGN 65274 65276 65276	SPI in F 3 7 1	N Position GN	Error P 38 80	ropietary PGNs Nur Fuel1 WashFluid	nbers show	uld be grater Fuel Level 2 Washer Fluid	than 6 C Level	5280 K Ratio of M Ratio of M	Replace	SPN Length	SF SF byt byt
au Vs	PGN 65274 65276 65276 65276	SPI in F 3 7 1 3	N Position GN	Error 38 80 95	ropietary PGNs Nur Fuel 1 WashPuic EngFuelFi	nbers show	uld be grater Fuel Level 2 Washer Fluid Engine Fuel Fi	than 6 C Level Iter	5280 5X Ratio of n Change i	Replace Replace ure of volume o n fuel de	SPN Length	SF byte byte byte
au Vs	ges & PGNs 65274 65276 65276 65276 65276 65276	SPI in F 3 7 1 3 2	V Position GN	Error 38 80 95 96	ropietary PGNs Nur Fuel1 WashRuit EngFuelFi Fuel1	nbers show	uld be grater Fuel Level 2 Washer Fluid Engine Fuel Fi Fuel Level 1	than 6 C Level Iter	5280 5280 Ratio of 1 Change i Ratio of 1	Replace nure of volume o n fuel de volume o	SPN Length 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SF byte byte byte byte byte
au Vs	ges & PGNs PGN 65274 65276 65276 65276 65276 65276 65276 65276	SPI in F 3 7 1 3 2 4	V Position GN	Error 38 80 95 96 99	Fuel1 Fuel1 WashRuid EngFuel1 Fuel1 EngOiFilt	nbers show	uld be grater Fuel Level 2 Washer Fluid Engine Fuel Fi Fuel Level 1 Engine Oil Filte	than 6 C Level Iter	5280 Skatio of 1 Ratio of 1 Ratio of 1 Ratio of 1 Change i Change i	Replace nure of volume o n fuel de volume o n engine	SPN Length 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SF byte byte byte byte byte
au	PGN 65274 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276	SPI in F 3 7 1 3 2 4 5-6	V Position GN	Error 38 80 95 96 99 169	Fuel 1 WashRuid EngFuelR Fuel EngOiFit EngOiFit Cargo@Att	nbers show	uld be grater Fuel Level 2 Washer Fluid Engine Fuel Fl Fuel Level 1 Engine Oil Filto Cargo Ambien	than 6 C Level Iter ar t T	5280 SK Ratio of n Ratio of n Change i Change i Tempera	Replace nure of volume o n fuel de volume o n engine ture of ai	SPN Length 1 1 1 1 1 1 1 2	SF byto byto byto byto byto byto byto
au	ges & PGN 65274 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 65276 6527	SPI in F 3 7 7 1 1 3 2 4 4 5 6 3 4	V Position GN	Error 38 80 95 96 99 169 8428	Fuel1 WashRuic EngFuelR Fuel1 EngOlFilt CargoAmb Fuel Supp	nbers show	uld be grater Fuel Level 2 Washer Fluid Engine Guel Fit Engine Oil Fitt Cargo Ambien Fuel Supply E	C C Level Iter t T stim	5280 Ratio of M Ratio of M Change i Ratio of M Change i Tempera Estimated	Replace P	SPN Length SPN Length	SF byte byte byte byte byte byte byte byte
au	gges & PGNs PGN 65274 65276 65276 65276 65276 65276 65276 65276 65276 65277 75	SPI in F 3 3 7 1 3 2 4 5-6 3.4	N Position GN	Error 38 80 95 96 99 169 8428	Fuel1 WashRuic EngFuel1 Fuel1 EngOilfit CargoAmb Fuel Supp	d l ly Estim	uld be grater Fuel Level 2 Washer Fluid Engine Fuel Fi Fuel Level 1 Engine Oil Filt Cargo Ambien Fuel Supply E	than 6 C Level Iter er t T	5280 Ratio of M Ratio of M Change i Ratio of M Change i Tempera Estimated	Replace P	SPN Length 1 1 1 1 1 1 2 2 2	SF

Custom PGN's must be greater than 65280. If a number lower than this is selected, a notification will pop up and the PGN will change to this number.

	Number	Signal	SPN	Soun Addr	rce ress	Di	isplay o-Limit	Disp Hi-L	play Limit	Unit	s		
	1	Fuel1	96	0		0		100	0.00007	%	0.		
	2	DEFLevel	1761	0		0		100		%			
	3	IntakeMan	105	0		-41		210		°C			
	4	EngOil	100	0		0		862		KPa			
	5	EngOil1						1735					
1	6	BrakePri	117	0		0		552		KPa			
	7	TransOil	127	0		0		4000	0	KPa			
	8	EngCoolant	110	0		-41		210		°C			
	9	EngOil1	175	0		-27	73	1734	4	°C			
								_		_			
aug Is 8	10 ges & PGNs	AuxTemp1	441	0		-41	20	210		°C	(Repla	ce Defaults	S Up
lu <u>c</u> Is 8	10 ges & PGNs PGN	AuxTemp1	441	0 2 5	5PN	-41	Signal	210	• SPN Name	°C ∽	Repla SPN Description	Ce Defaults	S Up
iu <u>c</u> Is 8	10 ges & PGNs PGN 65253	Aux Temp 1	441	0	5PN 49	-41	Signal EngTotRev	210	SPN Name Engine Total	°C	SPN Description Accumulated nu	ce Defaults SPN Length	SI Up
lu <u>c</u> ls 8	10 ges & PGNs PGN 65253 65257	AuxTemp1	441 A Position GN	0 S 24	5PN 49 82	-41	Signal EngTotRev EngTripFuel	210	SPN Name Engine Total Engine Trip F	Rev	Repla SPN Description Accumulated nu Fuel consumed d	Ce Defaults SPN Length	SI byt
aug Is 8	10 ges & PGNs PGN 65253 65257 65257	AuxTemp1 SPN in Pi 5-8 1-4 5-8	441 Position GN	0 S 24 18 25	5PN 49 82 50	41	Signal EngTotRev EngTripFuel EngTotFuel	210	SPN Name Engine Total Engine Trtp F Engine Total	Rev uel	Repla SPN Description Accumulated nu Fuel consumed d Accumulated am	SPN Length	SF Sf byt byt
iu <u>c</u> Is 8	10 ges & PGNs PGN 65253 65257 65257 65262	AuxTemp1 SPN in Pi 5-8 1-4 5-8 7	441 Position GN	0 S 24 18 25 52	SPN 49 82 50 2	41	Signal EngTotRev EngTripFuel EngTotFuel EngInterc	210	SPN Name Engine Total Engine Trip F Engine Total Engine Interc	°C Rev uel Fuel	Repla SPN Description Accumulated nu Fuel consumed d Accumulated am Temperature of li	SPN Length 4 4 1	SF
ls 8	10 9es 8 PGNs 65253 65257 65257 65262 65262	Aux Temp 1 SPN in Pr 5-8 1-4 5-8 7 1	441 477 V Position GN	0 S 24 18 25 52 11	5PN 49 82 50 2 10	41	Signal EngTotRev EngTripFuel EngTotFuel EngInterc EngCoolant	210	SPN Name Engine Total Engine Trip F Engine Total Engine Interc Engine Coola	Rev uel Fuel oole	PR Repla SPN Description Accumulated nu Fuel consumed d Accumulated am Temperature of li Temperature of li	SPN Length 4 4 1 1	Sf byt byt byt
au <u>c</u> Is é	10 ges 8 PGNs PGN 65253 65257 65262 65262 65262 65262	Aux Temp 1 SPN in Pi 5-8 1-4 5-8 7 1 2	441 Position GN	0 S 24 18 25 52 11 17	5PN 49 82 50 2 10 74	-41	Signal EngTotRev EngTripFuel EngTotFuel EngInterc EngCoolant EngFuel1	210	SPN Name Engine Total Engine Trip F Engine Total Engine Interc Engine Coola Engine Fuel 1	Rev uel Fuel nt T	Repla SPN Description Accumulated nu Fuel consumed d Accumulated am Temperature of li Temperature of li Temperature of li	SPN Length 4 4 1 1	Sf byt byt byt byt
su <u>c</u> ls 8	10 9es 8 PGNs 65253 65257 65262 65262 65262 65262 65262 65262	Aux Temp 1 	441 477 V Position GN	0 24 18 25 52 11 17	SPN 49 50 2 10 74 75	-41	Signal EngTotRev EngTotFuel EngTotFuel EngIotFuel EngCoolant EngCoolant EngCoolant EngCoolant	210	SPN Name Engine Total Engine Total Engine Total Engine Total Engine Coola Engine Coola Engine Oil Te	*C Rev uel Fuel oole nt T I Te	PR Description Accumulated nu Fuel consumed d Accumulated am Temperature of I Temperature of I Temperature of I.	SPN Length 4 4 1 1 1 2	SF byt byt byt byt byt
sug ls 8	10 9es 8 PGNs PGN 65253 65257 65262 65262 65262 65262 65262 65262	AuxTemp1 T 014 SPN in Pi 5-8 1-4 5-8 7 1 2 3-4 5-6	441 477 V Position GN	0 24 18 25 52 11 17 17	5PN 49 82 50 2 10 74 75 76	-41	Signal EngTotRev EngTopFuel EngTotFuel EngCoolant EngCol1 EngCOl1	210	SPN Name Engine Total Engine Trip F Engine Total Engine Cotal Engine Cotal Engine Cotal Engine Cotal Engine Oti Te Engine Turbo	*C Rev vuel Fuel oole nt T 1 Te cha	Repla SPN Description Accumulated nu Fuel consumed d Temperature of I Temperature of I Temperature of I Temperature of 1	SPN Length 4 4 1 1 2 2	SF byte byte byte byte byte byte byte
ls 8	10 10 10 10 10 10 10 10 10 10	Aux Temp 1 SPM in P 5-8 14 5-8 7 1 2 34 5-6 8	441 V Position GN	0 24 18 25 52 11 17 17 17 11	5PN 49 82 50 2 10 74 75 76 134	-41	Signal EngTotRev EngTopFuel EngTotFuel EngTotFuel EngColant EngO11 EngOC011	210	SPN Name Engine Total Engine Total Engine Total Engine Total Engine Cotal Engine Cotal Engine Cotal Engine Charg	"C Rev uel Fuel nt T 1 Te ccha mp e Ai	Repla SPN Description Accumulated nu Fuel consumed d Accumulated am Temperature of I Temperature of I Temperature of I Temperature of I Temperature of I The current posti	SPN Length 4 4 1 1 1 2 2 1	SI byt byt byt byt byt byt byt

When the selections are made, select the ^(*) Replace</sup> button and the selection will be replaced in the **Gauge Sources** panel. If changes are made by accident and you wish to revert to default settings, select the ^(*) Defaults</sup> button to reset parameters to factory default settings.

lumber	Signal	SPN	Source	Display	lisolay				
	1		Address	Lo-Limit	Hi-Limit	Uni	s		
	Fuel1	96	0	0	100	%	2		
	DEFLevel	1761	0	0	100	%			
	IntakeMan	105	0	-41	210	°C			
	EngOil	100	0	0	862	KPa			
	EngOil1	175	0	-273	1735	۲C			
	BrakePri	117	0	0	552	KPa			
	TransOil	127	0	0	4000	KPa			
	EngCoolant	110	0	-41	210	°C			
	EngOil1	175	0	-273	1734	°C			
1	AuxTemp1	441	0	-41	210	°C			
GN	SPN in PC	Position GN	SPN	Signal	SPN N	lame	SPN Description	SPN Length	SPN
TOFO	in PC	GN	240	5 T ID	E CONTRACT	TILD	Description	of the boright	- Crit
5253	0-0		243	Eng Tothey	Engine	Tele Final	Accumulated nu	4	byte
5257	E 0		250	EngTatFuel	Engine	Total Fuel	Accumulated am	4	byte
5262	7		52	Englisters	Engine	Intercoole	Temperature of li	1	bute
5262	1		110	Englineic	Engine	Coolant T	Temperature of li	1	bute
5262	2		174	EngEuel1	Engine	Fuel 1 Te	Temperature of f	1	byte
5262	3-4		175	EngOil1	Engine	Oil Temp	Temperature of t	2	byte
5262	5-6		176	EngTCOil1	Engine	Turbocha	Temperature of t	2	byte
5262	8		1134	EngAirCool	Engine	Charge Ai	The current positi	1	byte
	iNs 'GN i253 i257 i257 i257 i262 i262 i262 i262 i262 i262	Engoli Engoli 1 BrakePri EngOli 1 AuxTemp 1 	Engoli 100 Engoli 173 BrakePri 117 TransOli 127 EngColant 110 EngOli 175 AuxTemp1 441	Englil 100 0 EnglePhi 117 0 TransOll 127 0 EngleAtt 110 0 EngleAtt 110 0 EngleAtt 100 0 EngleAtt 100 0 AuxTemp1 441 0 AuxTemp1 441 0 Control FSN Position SPN SS 5-8 249 257 5-8 250 252 1-4 12 252 2 174 252 2 110 252 2 174 252 5-8 250 252 1 110 252 2 174 252 5-6 176 252 8 1134	Engoli 100 0 -273 BrakePri 117 0 0 TransOli 127 0 0 EngColant 110 0 41 EngColant 110 0 41 EngColant 110 0 41 EngColant 110 0 41 EngColant 10 41 0 41 EngColant 10 41 0 41 Total Eng 0 273 0 AuxTemp1 441 0 41 0 41 Total Eng Eng 0 0 0 0 V Eng N Signal 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Engoli 100 0 927 1735 BrakePri 117 0 0 552 TransOll 127 0 0 4000 EngCoolant 110 0 41 210 EngCoolant 110 0 41 210 EngCoolant 110 0 41 210 AuxTemp1 441 0 41 210 T 0 41 210 132 T 0 9 EngTotProl Engine 257 5-8 250 EngTotFreel Engine 252 1-4 182	Engoli 100 0 273 1725 17 BrakePri 117 0 0 552 KPa BrakePri 117 0 0 4000 KPa EngOolant 110 0 411 210 C EngOolant 110 0 411 210 C AuxTemp1 441 0 411 210 C AuxTemp1 441 0 41 210 C V V 0 411 210 C V V 0 411 210 C V V 0 41 210 V V V V V V V V V V	Englat 100 0 273 173 C BrakePri 117 0 273 1735 C BrakePri 117 0 0 552 KPa TransOll 127 0 0 4000 KPa EngCoolant 110 0 411 210 C EngOtil 175 0 -273 1734 'C AuxTemp1 441 0 41 210 'C AuxTemp1 441 0 41 210 'C V 0 582 173 'C 'C AuxTemp1 441 0 41 210 'C 'C V 0 174 175 C 'C 'C 'C 'C V 0 41 10 41 Engliter 'C 'C </td <td>EngOli 100 0 62/23 17/5 17/6 BrakePri 117 0 0 552 KPa BrakePri 117 0 0 552 KPa TransOli 127 0 0 4000 KPa EngCoolant 110 0 411 210 °C EngOti 175 0 -273 1734 °C AuxTemp1 441 0 41 210 °C AuxTemp1 441 0 41 210 °C V Vict Vict Vict Vict Vict V Vict Vict Vict Vict Vict Vict V Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict<!--</td--></td>	EngOli 100 0 62/23 17/5 17/6 BrakePri 117 0 0 552 KPa BrakePri 117 0 0 552 KPa TransOli 127 0 0 4000 KPa EngCoolant 110 0 411 210 °C EngOti 175 0 -273 1734 °C AuxTemp1 441 0 41 210 °C AuxTemp1 441 0 41 210 °C V Vict Vict Vict Vict Vict V Vict Vict Vict Vict Vict Vict V Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict Vict </td

Once all parameters are changed to desired settings, select the ^{SUpdate} button to save the settings.

	les Sources				LEGNON	U.S.W.W.				
	Number	Signal	SPN	Source Address	Display Lo-Limit	Display Hi-Limit	Uni	ts		
	1	Fuel1	96	0	0	100	%			
	2	DEFLevel	1761	0	0	100	%			
	3	IntakeMan	105	0	-41	210	°C			
	4	EngOil	100	0	0	862	KPa			
	5	EngOil1	175	0	-273	1735	°C			
	6	BrakePri	117	0	0	552	KPa			
	7	TransOil	127	0	0	4000	KPa			
	8	EngCoolant	110	0	-41	210	°C			
	9	EngOil1	175	0	-273	1734	°C			
	10	AuxTemp1	441	0			~			
	PGN	511	1 OSILION					SPN		
		Im Di	Chi				_	SPN	SPN Length	SI
_	65257	in P	GN		Yes	o Cancel		Description	SPN Length	Si
	65257 65257	in Pi 1-4 5-8	GN	1		Lo Cancel	Fuel	SPN Description Fuel consumed d	SPN Length	SI byt
	65257 65257 65262	in Pi 1-4 5-8 7	GN	1 250	Yes LingTotFue	Lo Cancel Engine Total Engine Inter	Fuel	SPN Description Fuel consumed d Accumulated am Temperature of li	SPN Length 4 4 1	SI byt byt
	65257 65257 65262 65262	in Pi 1-4 5-8 7 1	GN	1 250 52 110	Yes L EngTotFue EngInterc EngCoolan	Lo Cancel Engine Total Engine Interr t Engine Coole	Fuel coole	SPN Description Fuel consumed d Accumulated am Temperature of li Temperature of li	SPN Length 4 4 1 1 1	SI byt byt byt
	65257 65257 65262 65262 65262	in Pi 1-4 5-8 7 1 2	GN	1 250 52 110 174	Yes 1 EngTotFue EngInterc EngCoolan EngFuel1	Lo Cancel Engine Total Engine Interro t Engine Cool Engine Fuel	Fuel coole ant T 1 Te	SPN Description Fuel consumed d Accumulated am Temperature of li Temperature of li Temperature of f	SPN Length 4 4 1 1 1	SF byt byt byt byt
	65257 65257 65262 65262 65262 65262 65262	in Pi 1-4 5-8 7 1 2 3-4	GN	1 250 52 110 174 175	Yes 1 Englisterc EngCoolar EngFuel1 EngOil1	Lo Cancel Engine Total Engine Inter t Engine Cook Engine Fuel Engine Oil T	Fuel coole ant T 1 Te emp	SPN Description Fuel consumed d Accumulated am Temperature of li Temperature of f Temperature of t	SPN Length 4 4 1 1 1 2	SF byt byt byt byt byt
	65257 65257 65262 65262 65262 65262 65262 65262	in Pi 1-4 5-8 7 1 2 3-4 5-6	GN	1 250 52 110 174 175 176	Yes EngTotFue EngInterc EngCoolar EngFuel1 EngOil1 EngTCOil1	Lo Cancel Engine Total Engine Inter t Engine Cook Engine Fuel Engine OI To Engine Turb	Fuel coole ant T 1 Te emp ocha	SPN Description Fuel consumed d Accumulated am Temperature of li Temperature of f Temperature of t Temperature of t	SPN Length 4 4 1 1 1 2 2	SF byte byte byte byte byte byte
	65257 65257 65262 65262 65262 65262 65262 65262 65262	in Pi 1-4 5-8 7 1 2 3-4 5-6 8	GN	1 250 52 110 174 175 176 1134	Yes Eng TotFue EngInterc EngCoolar EngFuel1 EngOil1 EngOil1 EngAirCool	Cancel Engine Total Engine Inter Engine Coll Engine Coll Engine Coll Engine Turb Engine Turb	ruer coole ant T 1 Te emp ocha ge Ai	SPN Description Fuel consumed d Accumulated am Temperature of li Temperature of f Temperature of t Temperature of t The current positi	SPN Length 4 4 1 1 1 2 2 1 1 1 2 2 1 1 1 2 2 1 1 1 1	SF byte byte byte byte byte byte byte
	65257 65257 65262 65262 65262 65262 65262 65262 65262 65263	in Pi 1-4 5-8 7 1 2 3-4 5-6 8 8 2	GN	1 250 52 110 174 175 176 1134 22	Yes L EngTotFue EngCoolar EngFuel1 EngCol1 EngCOl1 EngAirCoo EngExtCe	Cancel Engine Total Engine Total Engine Cool Engine Cool Engine Ol Tr Engine Turb Engine Char Engine Char	Fuer coole ant T 1 Te emp ocha ge Ai nded	SPN Description Fuel consumed d Accumulated am Temperature of li Temperature of f Temperature of t The current positi Differential crank	SPN Length 4 1 1 1 2 2 1 1 1	SF byte byte byte byte byte byte byte byte
	65257 65257 65262 65262 65262 65262 65262 65262 65262 65263	in Pi 1-4 5-8 7 1 2 3-4 5-6 8 2 2	GN	1 250 52 110 174 175 176 1134 22	Yes L EnglotHue EnglotHue EngColar EngFuell EngTCull EngTCull EngTCull	to Cancel Engine Total Engine Intern Engine Cool Engine Cool Engine Coll T Engine Char Engine Char Engine Char	Fuel coole ant T 1 Te emp ocha ge Ai nded	SPN Description Fuel consumed d Accumulated am Temperature of li Temperature of l Temperature of t Temperature of t The current positi Differential crank	SPN Length 4 4 1 1 1 2 2 1 1 1 1 2 2 1 1 1 1 2 2 1 1 1 1 2 2 1 1 1 2 2 2 1 1 1 2 2 2 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	SF byte byte byte byte byte byte byte

You will be asked to confirm that you wish to save changes. Select **YES** to apply changes. Selecting **NO** will allowing you to continue editing without removing all existing changes. Selecting **CANCEL** will revert all changes and cancel editing.

7.4 I	_ED	Warni	ng L	ights
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	Number	Signal	SPN	Source Address	Threshold-Lo	Threshold-Hi	Lamp Off Mask	Lamp On Mask	Lam Mas
	1	ABS/EBS Amber	1438	0	0	100	0	1	3
	2	Low Fuel	5088	0	0	100	0	1	3
	3	Hydraulic Oil Temp	977	0	0	100	0	6	15
	4	Engine Oil Pressure	5082	0	0	100	0	1	3
	5	Hydraulic Filter Pre	1713	0	0	100	0	1	2
	6	Alternator Char Fail	3353	0	0	100	1	0	2
	7	Wait to Start	1081	0	0	100	0	1	2
	8	Engine Malfunction	5078	0	0	100	0	1	3
	0	Hydraulic Pres Br	2584	0	0	100	0	1	2
	3			-	-		-		
arr	ning Lights I	Tim Simal Let	2367	n	n.	100	n Repla	1 ce 🍤 Defaults	S Up
arr	ning Lights I	Tim Cinnal Lef ED SPN Postic in PGN	7367 n	SPN	Signal	100 SPN Name	n Repla	1 ce 🕤 Defaults SPN Length	S Up
arr	ning Lights I ning Lights I ning Lights I ellaneous	Tim Cinnal Laft	n	SPN 518	n Signal Engine Requeste	INN SPN Name Engine Requeste	n Repla	Ce Defaults SPN Length 1	S Up
arr	ning Lights I ning Lights I ellaneous	LEI - SPN Postion SPN Postion SPN Postion 4 1.1	73£7	SPN 518 695	Signal Engine Requeste Engine Override	SPN Name Engine Requeste Engine Override	n Repla SPN Description Parameter provid The override con	Defaults SPN Length	S Up
arr arr sc	ning Lights I ning Lights I ning Lights I ellaneous 0 0 0 0	LEI TIM Signal Left SPN Positi in PGN 4 1.1 1.3	73457	SPN 518 695 696	Signal Engine Requeste Engine Overide Engine Requeste	SPN Name Engine Requeste Engine Override Engine Requeste	n SPN Description Parameter provid The ovenide con This mode tells th	SPN Length	SI bits bits
arr arr	ning Lights I ning Lights I ellaneous 0 0 0 0 0	LEI V SPN Postii in PGN 4 1.1 1.3 1.5	7367 7367	SPN 518 595 596 897	Signal Engine Requeste Engine Requeste Overide Control	SPN Name Engine Requeste Engine Requeste Override Control	Repla SPN Description Parameter provid This mode tells th This field is used	Defaults SPN Length 1 2 2 2 2	SF byt bits bits
arr	ning Lights I ning Lights I ling Lights I ellaneous 0 0 0 0 0 0 0	ED SPN Positi in PGN 4 1.1 1.5 2.3	n	SPN 518 695 696 897 898	Signal Engine Requeste Engine Requeste Oventde Control Engine Requeste	SPN Name Engine Requeste Engine Requeste Engine Requeste Engine Requeste	Repla SPN Description Parameter provid The override con This field is used Parameter provid	Defaults SPN Length 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	SI bits bits bits
arr	ning Lights I ning Lights I ellaneous 0 0 0 0 0 0	Tim Gonal J # ED SPN Posti in PGN 4 1.1 1.3 1.5 2.3 5.1	2367	SPN 518 695 696 897 898 3349	n Signal Engine Requeste Engine Requeste Ovenide Control Engine Requeste TSC1 Transmissi	SPN Name Engine Requeste Engine Override Engine Requeste Override Control TSCI Transmissi TSCI Transmissi	n	Defaults SPN Length 1 2 2 2 3	SF States SF SF SF SF SF SF SF SF SF SF SF SF SF
arr	ning Lights I ning Lights I ning Lights I lights I lights I 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Tim Cond Latt ED SPN Posti in PGN 4 1.1 1.5 2.3 5.1 6.1	7367	SPN 518 595 596 897 898 3349 4191	n Signal Engine Requeste Engine Requeste Ovenide Control Engine Requeste TSC1 Trameste Engine Requeste	SPN Name Engine Requeste Engine Requeste Override Control Engine Requeste TSC1 Transmissi TSC1 Transmissi	n Repla SPN Description Parameter provid This mode tells th This field is used Parameter provid This parameter in This parameter d	Defaults SPN Length 1 2 2 2 3 4	SF byto bits bits bits bits
arr	10. ning Lights I ning Lights I ning Lights I 0 0 0 0 0 0 0 0 0 0 0 0 0	Tim Gonal Latt EP SPN Positi in PGN 4 1.1 1.3 1.5 2.3 5.1 6.1 3	2367	SPN 518 595 596 897 898 3349 4191 525	n Signal Engine Requeste Engine Requeste Override Control Engine Requeste TSC1 Transmiss Engine Requeste Transmission Re	SPN Name Engine Requeste Engine Requeste Engine Requeste Override Control Engine Requeste TSC1 Transmission Re Transmission Re	n Parameter provid The overnide corr Parameter provid This field is used Parameter di This parameter di Gear requested b Gear requested b	Defaults SPN Length 1 2 2 2 3 4 1	SF byto bits bits bits bits bits
arr	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EP EP EP SPN Positi in PGN 4 1.1 1.3 1.5 2.3 5.1 6.1 3 1.1	2367	SPN 518 696 696 897 898 3349 4191 525 681	n Signal Engine Requeste Engine Override Engine Requeste Toch Transmissi Engine Requeste TSCI Transmissi Transmission Re Transmission Re	SPN Name Engine Requeste Engine Override Engine Requeste Override Control Engine Requeste TSC1 Transmission Re Transmission Re Transmission Re	n	Defaults SPN Length 1 2 2 2 3 4 1 2 2	SI byt bits bits bits bits bits bits

On models with icons, such as maxAI 430i and maxAI 430iv, the LED warning lights can also be configured here. This is done by selecting **Warning Lights LED** from the tab at the center of the page on the left side, as indicated in the above illustration. 20 warning lights can be set up. Editing capabilities for warning lights are the same as for the gauges.

7.5 LCD Warning Lights

	Number	Signal	SPN	Source Address	Threshold-Lo	Threshold-Hi	Lamp Off Mask	Lamp On Mask	Lam Mas
	÷.	ABS/EBS Amber	1438	0	0	100	0	1	3
	2	Low Fuel	5088	0	0	100	0	1	3
	3	Hydraulic Oil Temp	977	o	0	100	0	6	15
	4	Engine Oil Pressure	5082	0	0	100	0	1	3
Vai au /ar	rning Lights I Iges ning Lights I ning Lights I		0002				Repla	ce 🕤 Defaults	'S Upo
/aı au /ar	rning Lights I Iges ning Lights I ning Lights I	LC • CD SPN Position in PGN	n	SPN	Signal	SPN Name	Repla SPN Description	ce 🕤 Defaults SPN Length	S Up
/aı au	rning Lights I iges ning Lights I ning Lights I ullansour	SPN Position in PGN 4	n [5	SPN 518	Signal	SPN Name Engine Requeste	Repla SPN Description Parameter provid	ce 🕤 Defaults SPN Length	S Up
/aı	rning Lights I Iges ming Lights I Uppeour 0 0	SPN Position in PGN 4 1.1	n 5	SPN 518 595	Signal Engine Requeste Engine Overide	SPN Name Engine Requeste Engine Overtide	Repla SPN Description Parameter provid The override con	ce Defaults SPN Length	SF byte
/ar	rning Lights I iges ming Lights I ulapscus 0 0 0 0	LC • SPN Position in PGN 4 1.1 1.3	n 6	SPN 518 595 596	Signal Engine Requeste Engine Requeste	SPN Name Engine Requeste Engine Overtide Engine Requeste	Repla SPN Description Parameter provid The override con This mode tells th	ce Defaults SPN Length 1 2 2	SF bits bits
/aı	rning Lights I Iges ming Lights I Unneour 0 0 0 0 0	CD SPN Position in PGN 4 1.1 1.3 1.5	n 6	SPN 518 595 596 397	Signal Engine Requeste Engine Requeste Override Control	SPN Name Engine Requeste Engine Override Engine Requeste Override Control	Repla SPN Description Parameter provid The override con This mode tells th This field is used	Ce Defaults SPN Length 1 2 2 2	SF SF byte bits bits
/aı	rning Lights I iges ming Lights I lansour 0 0 0 0 0 0	CO SPN Position in PGN 4 1.1 1.3 1.5 2.3	n 6	SPN 518 595 596 197 398	Signal Engine Requeste Engine Override Override Control Engine Requeste	SPN Name Engine Requeste Engine Requeste Overide Control Engine Requeste	Repla SPN Description Parameter provid This mode tells th This field is used Parameter provid	Ce Defaults SPN Length 1 2 2 2 2 2	SP SP byte bits bits bits
/aı	ming Lights I iges ming Lights I lansour 0 0 0 0 0 0 0 0 0	CD SPN Postion in PGN 4 1.1 1.3 1.5 2.3 5.1	n 6 6 8 8 8	SPN 518 595 596 597 398 3349	Signal Engine Requeste Engine Override Engine Requeste Override Control Engine Requeste TSC1 Transmissi	SPN Name Engine Requeste Engine Override Engine Requeste Override Control TsC1 Transmissl	Repla SPN Description Parameter provid This mode tells th This field is used This field is used This field reprovid This parameter provid	Ce Defaults SPN Length 1 2 2 2 2 3	SP SP byte bits bits bits bits
/aı	rning Lights I Iges Thing Lights I Unpresent 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CD SPN Position PGN 4 1.1 1.3 1.5 2.3 5.1 6.1	n 552	SPN 518 595 596 597 798 3349 4191	Signal Engine Requeste Engine Override Engine Requeste Override Control Engine Requeste Engine Requeste	SPN Name Engine Requeste Engine Overnde Engine Requeste Overnde Control Engine Requeste Engine Requeste	Repla SPN Description Parameter provid This operated com. This mode tells th This field is used Parameter provid This parameter in This parameter in	SPN Length 1 2 2 2 3 4	SP byte bits bits bits bits bits
/aı	ming Lights I iges ming Lights I classified 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CO SPN Postico 4 1.1 1.3 1.5 2.3 5.1 6.1 3	n 552	SPN 518 595 596 397 398 3349 4191 525	Signal Engine Requeste Engine Requeste Ovenide Control Engine Requeste TSC1 Transmissi Engine Requeste Transmission Re	SPN Name Engine Requeste Engine Requeste Override Control Engine Requeste TSC1 Transmissi TSC1 Transmissi Transmission Re	Repla SPN Description Parameter provid The override con This field is used Parameter in This parameter in Gear requested b Gear requested b	SPN Length	SP byte bits bits bits bits bits bits
/aı	ming Lights I ggs ming Lights I diagons 0 0 0 0 0 0 0 0 0 0 0 0 0 256 256	CD SPN Postion in PGN 4 1.1 1.3 1.5 2.3 5.1 6.1 3 1.1	n 5002	SPN 518 595 596 597 398 3349 4191 525 581	Signal Engine Requeste Engine Requeste Overide Control Engine Requeste TSC1 Transmissi Engine Requeste Transmission Re Transmission Re	SPN Name Engine Requeste Engine Requeste Engine Requeste Overde Control Engine Requeste TSC1 Transmissi Engine Requeste Transmission Re Transmission Re	Repla SPN Description Parameter provid The override corr This field is used Parameter provid This parameter in This parameter in Command signal t	SPN Length 1 2 2 2 3 4 1 2 2	SP byte bits bits bits bits bits bits bits bits

LCD Warning Lights is available in all models, maxAI 430, maxAI 430i, maxAI 430v and maxAI 430iv, These Warning Lights will appear as a pop-up image in the LCD, after dismissing the pop-up the status of the Warning Light can be monitored by an LCD lamp on base screen and on a more detailed level through a menu option in the cluster. This option is available by selecting **Warning Lights LCD** from the dropdown menu the tab at the center of the page on the left side, as indicated in the above illustration.

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21

There is a total of 21 configurable LCD Warning Lights. Editing capabilities for warning lights are the same as for the gauges.

1000	ing Egnis LCD	Jources		Lamp Off	Lamp	On Lamp F	Nink	1	(and and a	-
	Idress	Threshold-Lo	I hreshold-Hi	Mask	Mask	Mask	Units	Icon	OnColor	8
×.		0	100	0	1	3	states/	24	mber	~
		0	100	0	1	3	states/	2bit	Amber	~
		0	100	0	6	15	states/	4bit 💧	Amber	2
		0	100	0	1	3	states	2bit =	Red	>
Wa	irning Lights Li s & PGNs	c •				T.	Repla	ce 🕤 Defa	aults 🙄 Up	po
Wa PNs	Irning Lights Li s & PGNs PGN	C -	on SPN	Signa	1	SPN Name	Repla SPN Description	ce 🕤 Defa	aults 😋 Up th SF	po P
Wa	PGN	C • SPN Positi in PGN 4	²ⁿ SPN 518	Signa	l Requeste	SPN Name Engine Requeste	Repla SPN Description Parameter provid	ce 🕤 Defa SPN Leng	aults 😋 Up th SF	P
Wa PNs	PGN 0	C - SPN Positi in PGN 4 1.1	on SPN 518 695	Signa Engine Engine	l Requeste	SPN Name Engine Requeste Engine Override	Repla SPN Description Parameter provid The override con	ce Defa SPN Leng 1 2	aults 🙄 Up th SF bits	P
Wa	arning Lights Li s & PGNs PGN 0 0 0	C - SPN Positi in PGN 4 1.1 1.3	on SPN 518 695 696	Signa Engine Engine Engine	e Requeste e Override e Requeste	SPN Name Engine Requeste Engine Override Engine Requeste	Repla SPN Description Parameter provid The override con This mode tells th	ce Defa SPN Leng 1 2 2	aults 🙄 Up th SF byt bits	Ptes
Wa PNs	PGN PGN 0 0 0 0 0	C - SPN Positi in PGN 4 1.1 1.3 1.5	on SPN 518 695 696 897	Signa Engine Engine Engine Overni	l e Requeste e Override e Requeste de Control	SPN Name Engine Requeste Engine Override Engine Requeste Override Control	Repla SPN Description Parameter provid The override con This mode tells th This field is used	SPN Leng	th SF bits bits bits	Ptess
Wa 6PNs	PGN PGN 0 0 0 0 0 0 0 0	C - SPN Poatti in PGN 4 1.1 1.3 1.5 2.3	on SPN 518 695 696 897 898	Signa Engine Engine Overni Engine	e Requeste e Override e Requeste de Control e Requeste	SPN Name Engine Requeste Engine Override control Override Control Engine Requeste	Repla SPN Description Parameter provid This mode tells th This field is used Parameter provid	Ce Defa SPN Leng 1 2 2 2 2	th SF byt bits bits bits bits	P te s s s
K Wa 6PNt	PGN 0 0 0 0 0 0 0 0 0 0 0 0 0	C • SPN Positi in PGN 4 1.1 1.3 1.5 2.3 5.1	on SPN 518 695 696 897 888 3349	Signa Engine Engine Overni Engine TSC1	l e Requeste e Override e Requeste de Control e Requeste Transmissi	SPN Name Engine Requeste Engine Override Engine Requeste Override Control TSC1 Transmissi	Repla SPN Description Parameter provid This mode tells th This field is used This field is used This field reprovid This parameter provid	SPN Leng 1 2 2 2 2 3	th SF byt bits bits bits bits bits	P te s s s s
K Wa €PN:	PGN 0 0 0 0 0 0 0 0 0 0 0 0 0	C - SPN Posti- in PGN 4 1.1 1.3 1.5 2.3 5.1 6.1	on SPN 518 695 696 897 898 3349 4191	Signa Engine Engine Overni Engine TSC1 Engine	I e Requeste e Override e Requeste de Control e Requeste Transmissi e Requeste e Requeste	SPN Name Engine Requeste Engine Override Override Control Engine Requeste TSC1 Transmissi Engine Requeste	Repla SPN Description Parameter provid This parameter provid This parameter provid This parameter in This parameter in This parameter in	SPN Leng 2 2 3 4	th SF byt bits bits bits bits bits bits bits bit	P te s s s e s
¥ Wa ₩PNt	arning Lights L s & PGNs PGN 0 0 0 0 0 0 0 0 0 0 0 256	C • SPN Posti- in PGN 4 1.1 1.3 1.5 2.3 5.1 6.1 3	on SPN 518 695 696 897 888 3349 4191 525	Signa Engine Engine Engine Engine TSC1 Engine TSC1 Engine	Pequeste 9 Override 9 Requeste 16 Control 9 Requeste 17 Requeste 17 Requeste 19 Requeste 19 Requeste	SPN Name Engine Requeste Engine Requeste Override Control Engine Requeste TSC1 Transmissi Transmission Re Transmission Re	Repla SPN Description Parameter provid This order tells th This field is used Parameter provid This parameter a Gear requested b Gear requested b	Ce Defa	th SF byt bits bits bits bits bits bits bits bit	P te s s s e
Wa PNt	PGN PGN PGN 0 0 0 0 0 0 0 0 0 0 0 0 0	C - SPN Postb in PGN 4 1.1 1.3 1.5 2.3 5.1 6.1 3 1.1	on SPN 518 695 695 897 898 3349 4191 525 681	Signa Engine Engine Engine Engine TSC1 Engine TSC1 Transr	Requeste 9 Override 9 Requeste 16 Control 17 Requeste 17 Requeste 19 Requeste 19 Requeste 19 Requeste 19 Requeste	SPN Name Engine Requeste Engine Override Override Control TsC1 Transmission Engine Requeste Transmission Ge Transmission Ge	Repla SPN Description Parameter provid This evenide con This field is used This field is used This parameter provid This parameter fin This parameter de Command signal t	Ce Defa SPN Leng 2 2 2 2 3 4 1 2	th SF byt bits bits bits bits bits bits bits bit	P te s s s s s s s

LCD Warning Lights icons can be customized double clicking on the image under the **Icons** column on the far right of the parameters row.

Select Image File	3
🗁 🚽 🛧 🔒 > This PC > Pictures > sample_icons	✓ Ŏ ,0 Search sample_icons,
Organize 🔻 New folder	e • 💷 🔞
Documentation *	2.5hmp
OneDrive	
Jos P. Jos Objects Desitop	
Documents	
Music	
Pictures Videos SDisk (C)	
File game	✓ Image Files (^jpg ; *,jpeg ; *,pn
Contraction of the second s	 Open Cancel

A Select Image File menu will appear. Any *.jpg, *.jpg, *.jpg, *.gif, *.tiff, *.nef or *.bmp image can be selected as long it has an image size of 50 x 50 Pixels.

erational	Operational Max	Data Range Min	Data Range Max	Resolution per bit	Dffaet	Units	icon
	3212 75	0	3212.75	0.05	0	v C	>==

Some signals already have a default icon that will be displayed in the Icon column of the SPNs & PGNs section.

	ource Idress	Threshold-Lo	Threshold-Hi	Lamp Off Mask	Lamp (Mask	On Lamp E Mask	Blink Units	lcon	OnColor
2		0	100	0	1	3	states/	26it (@8	Amber Amber Red
		0	100	0	1	3	states/	26# B	Green Blue Amore
		0	100	0	6	15	states/-	4bit 💧	Amber
		0	100	0	1	2	states/	···	Red
Wa PNs	rning Lights I s & PGNs	.c •					🕐 Repla	ce 🕤 Defa	ults 😋 Up
Wa PNs	rning Lights I 8 PGNs PGN	LC - SPN Position in PGN	on SPN	Signal		SPN Name	Replace SPN Description	ce 🕤 Defa	ults 😋 Up
Wai PNs	rning Lights I & PGNs PGN 0	SPN Positiv in PGN	on SPN 518	Signal	Requeste	SPN Name Engine Requeste	Replace SPN Description Parameter provid	ce 🕤 Defa SPN Lengt	ults 😪 Up
Wa.	rning Lights I 8 PGNs PGN 0 0	SPN Positi in PGN 4 1.1	on SPN 518 695	Signal Engine F Engine C	Requeste	SPN Name Engine Requeste Engine Override	Replace SPN Description Parameter provid The override con	SPN Lengt	h Sf
Wa PNs	rning Lights I s & PGNs PGN 0 0 0	SPN Positiv in PGN 4 1.1 1.3	on SPN 518 695 696	Signal Engine F Engine G Engine F	Requeste Dverride Requeste	SPN Name Engine Requeste Engine Override Engine Requeste	Replace SPN Description Parameter provid The override con This mode tells th	SPN Lengt	h Sf bits bits
Wa PNs	PGN 0 0 0 0 0	SPN Positiv in PGN 4 1.1 1.3 1.5	on SPN 518 695 696 897	Signal Engine F Engine C Engine F Overde	Requeste Override Requeste Control	SPN Name Engine Requeste Engine Override Override Control	Replace SPN Description Parameter provid This mode tells th This field is used	SPN Lengt	h Sf byt bits bits
Wa PNs	PGN PGN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SPN Positi in PGN 4 1.1 1.3 1.5 2.3	on SPN 518 695 696 897 898	Signal Engine f Engine f Overide Engine f	Requeste Dverride Requeste Control Requeste	SPN Name Engine Requeste Engine Requeste Engine Requeste Dveride Control Engine Requeste	Replace SPN Description Parameter provid This mode tells th Parameter provid Parameter provid	SPN Lengt	h Sf byt bits bits bits
Wa PNs	PGN PGN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C - SPN Posti in PGN 4 1.1 1.3 1.5 2.3 5.1	on SPN 518 695 696 897 898 3349	Signal Engine f Engine f Overtide Engine f TSC1 Tr	Requeste Override Requeste Control Requeste ansmissi	SPN Name Engine Requeste Engine Override Engine Requeste Override Control TSC1 Transmissi	Replay SPN Description Parameter provid This eventide con This field is used This field is used This parameter provid	SPN Lengt	h Sf byt bits bits bits bits bits bits
Wa PNs	rning Lights I 8 PGNs PGN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SPN Posti in PGN 4 1.1 1.3 1.5 2.3 5.1 6.1	on SPN 518 695 696 897 898 3349 4191	Signal Engine F Engine C Engine F Overtide Engine F TSC1 Tr Engine F	Requeste Dverride Requeste Control Requeste ansmissi Requeste	SPN Name Engine Requeste Engine Requeste Override Control Engine Requeste Engine Requeste Engine Requeste	Replay SPN Description Parameter provid This oreander con This field is used Parameter provid This parameter in This parameter d	SPN Lengt 1 2 2 2 3 4	h SJ bits bits bits bits bits bits bits
Wa PNs	rning Lights I & PGNs PGN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SPN Poati in PGN 4 1.1 1.3 1.5 2.3 5.1 6.1 3	on SPN 518 695 696 897 898 3349 4191 525	Signal Engine F Engine O Override Engine F TSC1 Tr Engine F Transmit	Requeste Dverride Requeste Control Requeste ansmissi Requeste ssion Re	SPN Name Engine Requeste Engine Requeste Override Control Engine Requeste TSC1 Transmissi TSC1 Transmission Re Transmission Re	Replay SPN Description Parameter provid This praveter provid This field is used Parameter in This parameter in Gear requested b	Ce Defa SPN Lengt 1 2 2 2 3 4 1	h SJ bits bits bits bits bits bits bits bits
Wa PNs	ming Lights I & PGNs PGN 0 0 0 0 0 0 0 0 256 256	SPN Poati in PGN 4 1.1 1.3 1.5 2.3 5.1 6.1 3 1.1	on SPN 518 695 696 897 898 3349 4191 525 681	Signal Engine f Engine f Overide Engine f TSC1 Tr Engine f Transmit Transmit	Requeste Verride Requeste Control Requeste ansmissi Requeste ssion Re	SPN Name Engine Requeste Engine Overide Engine Requeste Overide Control TSC1 Transmissi Engine Requeste Transmission Ge	Replay SPN Description Parameter provid This mode tells th This field is used This field is used This parameter provid This parameter d Gear requested b Command signal t	SPN Lengt 1 2 2 2 2 3 3 4 1 2	h SI byt bit bit bit bit bit bit bit bit bit

The Warning Light Active background color can be selected from the dropdown menu of the **OnColor** column. The available colors are **Amber**, **Red**, **Green** and **Blue**.



True color images are supported to use as icon but consider that **Transparent*** and **Black+** pixels will be used as image background, and these sections will change color to selected on color when Warning Light is active.

*Only GIF and PNG image file formats could include transparencies.

+Black pixels are considered when all RGB registers <50

7.6 Miscellaneous

	Number	Function	Gianal	CDN Source	Tomebold I	Threshold Li	Off	On
	TNUMBER	Tuncauti	Jigha	Address	Theshold-D	5 Thieshold-Fil	Mask	Mask
	1	Video Display Switch	Transmission Current	523 3	0	100	0	1
/lis	cellaneous	•				📀 Repla	ce 🕤 Defaults	'G Up
1is au /ar /ar 1is	cellaneous ges ning Lights LE ning Lights L (cellaneous	D SPN Position	SPN	Signal	SPN Name	Repla SPN Description	ce 🅤 Defaults SPN Length	S Up
1is au /ar lis	cellaneous ges ning Lights LE cellaneous 61445	D D SPN Position in PGN 4	SPN 523	Signal Transmission Curr	SPN Name Transmission Curr	Repla SPN Description The gear currentl	ce 🕤 Defaults SPN Length	SF Up
Ais au /ar Ais	cellaneous ges ning Lights LE cellaneous 61445 61445	D D SPN Position in PGN 4	SPN 523 524	Signal Transmission Curr Transmission Sel	SPN Name Transmission Curr Transmission Sel	Repla SPN Description The gear currentl The gear that the	ce ODefaults SPN Length	SF
/lis iau Var /lis	cellaneous ges ning Lights LE cellaneous 61445 61445 256	D SPN Position in PGN 4 1 3	SPN 523 524 525	Signal Transmission Curr Transmission Sel Transmission Re	SPN Name Transmission Curr Transmission Sel Transmission Re	Repla SPN Description The gear currentl Gear requested b	Ce Defaults SPN Length 1 1 1 1	SF SF byt byt
/lis iau Var Var	cellaneous ges ning Lights LE cellaneous 61445 61445 256 65132	SPN Position in PGN 4 1 3 4.7	SPN 523 524 525 1619	Signal Transmission Curr Transmission Sel Transmission Re Direction indicator	SPN Name Transmission Curr Transmission Sel Transmission Re Direction indicator	Repla SPN Description The gear currentl The gear that the Gear requested b Indicates the dire	SPN Length	SI byt byt bits
∕lis Gau Var ∕lis	cellaneous ges ning Lights LE cellaneous 61445 61445 256 65132 65360	SPN Position in PGN 4 1 3 4.7 3.5	SPN 523 524 525 1619 2551	Signal Transmission Curr Transmission Re Direction indicator ABS/ETOT	SPN Name Transmission Curr Transmission Sel Transmission Re Direction indicator Seagrave Prop	Repla SPN Description The gear currentl Gear requested b Indicates the dire. Special Coded V	Ce Defaults SPN Length 1 1 2 2 2	SF byt byt bits
√lis Gau Var Var	cellaneous ges ning Lights LE cellaneous 61445 61445 256 65132 65360 65360	P D SPN Position in PGN 4 1 3 4.7 3.5 2.3	SPN 523 524 525 1619 2551 2551,1	Signal Transmission Curr Transmission Sel Direction indicator ABS-Error Park-Brake	SPN Name Transmission Curr Transmission Sel Transmission Re Direction indicator Seagrave Prop Seagrave Prop	Repla SPN Description The gear currentl The gear that the Gear requested b Indicates the dire Special Coded V. Special Coded V.	Ce Defaults SPN Length 1 1 2 2 2 2	SF byte byte bits bits
∕lis Jau Var ∕lis	cellaneous ges ning Lights LE cellaneous 61445 61445 256 65132 65360 65360 65360	D SPN Position in PGN 4 1 3 4.7 35 2.3 2.1	SPN 523 524 525 1619 2551 2551 2551 2551 2551 11	Signal Transmission Curr Transmission Sel Direction indicator ABS-Error Park-Brake Low Air	SPN Name: Transmission Curr Transmission Sel Transmission Re Direction indicator Seagrave Prop Seagrave Prop	Repla SPN Description The gear currentl The gear that the Gear requested b Indicates the dire Special Coded V Special Coded V	SPN Length 1 1 2 2 2 2 2	SF byte byte bits bits bits bits
√lis Gau Var Var	cellaneous ges ning Lights LE iop Lights LE cellaneous 61445 256 65132 65360 65360 65360	SPN Position In FGN 4 1 3 4.7 3.5 23 2.1 2.5	SPN 523 524 525 1619 2551 2551 2551 2551 11 2551 11 2551 12	Signal Transmission Curr Transmission Rel Direction indicator ABS-Error Park-Brake Low Air Left turm	SPN Name Transmission Cutr Transmission Rel Transmission Rel Direction indextor Seagrave Prop Seagrave Prop Seagrave Prop	Repla SPN Description The gear currentl The gear that the Gear equested b Indicates the dre Special Coded V Special Coded V. Special Coded V.	SPN Length 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	SF byte byte bits bits bits bits bits bits
Vis Gau Var Vis	cellaneous ges ming Lights LE cellaneous 61445 256 65132 65360 65360 65360 65360 65360	D D SPN Position in PGN 4 1 3 4.7 35 2.3 2.1 2.5 1.1	SPN 523 524 525 1619 2551 2551 2551 2551 11 2551 11 2551 12 2551 13	Signal Transmission Curr Transmission Sel Direction indicator ABS:-Error Park-Brake Low Air Left turn High Beam	SPN Name Transmission Curr Transmission Re Direction indicator Seagrave Prop Seagrave Prop Seagrave Prop Seagrave Prop	Repla SPN Description The gear currentl The gear that the Gear requested b Indicates the dire Special Coded V. Special Coded V. Special Coded V. Special Coded V. Special Coded V.	SPN Length 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	SF byte byte bits bits bits bits bits bits bits

On models with advance features, such as maxAI 430v and maxAI 430iv, the Camera Video CAN activation can be configured here. This is done by selecting **Miscellaneous** from the tab at the center of the page on the left side, as indicated in the above illustration. Editing capabilities are the same as for the gauges, but the amount of J1939 standard messages will be limited to **PGN 61445 SPN 523, PGN 61445 SPN 524, PGN 256 SPN 525** and **PGN 65132 SPN 1619**. Any proprietary **PGN** can be selected.

NOTE: Make sure to configure the Source Address to the appropriate value.

8 Setup

The **Setup** tab will allow you to set your instrumentation parameters including number of screens, cluster layout for each screen, analog inputs, instrumentation sources and limits, warning light sources and limits, and output, as well as open and save configurations and read or write configurations to and from the maxAI 430iv.

8.1 Tab 1 - Configure Display

8.1.1 Splash



To change the cluster splash screen, select the Load button.

Select Splash tab.



Select the file to be used for the new splash screen. For best results, choose an image that is sized to 480 x 272. All other sizes will be automatically adjusted to this size and may distort the image.



Once the new image is selected, it will show up on the screen. At this point, the new splash screen will be ready to write to the display. Click on Apply to start the writing process of the splash screen in to the cluster.

	Firmware -Splash new screen.srec	
	Programming 256 bytes starting at 90035F00h	
	Elapsed time: 00:07	Cancel
he progress bar will indicate the new information	tion is being written.	
	Firmware -Splash new screen.srec	
	Firmware update completed successfully	
	Elapsed time: 00:08	ОК

Once the process is completed click **OK** and disconnect and reconect power the unit to finish the process.

,



The display time can be configured from 0 Seconds (no Slpash Screen) up to 10 seconds using the **Display Time** slider.
8.1.2 Icons

Advanced Cluster PC Tool				- 1	I X
m •		🖶 Read 🥖 Write	Connected	() Initialize	() Releas
Settinga Setup					
Configure Display Inputs Gauge Sources Warning Light	s Output Ouster Config				
Splain foors Screen 1 Screen 2 Screen 3 Screen	n 4 Senson 5 Video				
Weming Lights LCD loons					
(Apply)					
	▶ (700)				
	(D)				
_F-3, 🧐 🚳 🕥					
	The second second				
	and the second se				

The configured icons images for the LCD Warning Lights are displayed in this tab, to wirte the images in to the cluster click on **Apply**.

ringina ming eso bytes statting at soo motion	

The progress bar will indicate the new information is being written.



Once the process is completed click **OK** and disconnect and reconect power the unit to finish the process.

8.1.3 Screen 1 - 5

The section Show Options is common between screens 1 - 5:



CONFIGURATION SCREEN TIMEOUT





This option will enable a timeout of 5 seconds that will automaticatly close the Configuration Screen if no input is received in the keypads. When disabled the Configuration Screen will be open until the close keypad is pressed.

AUTOSWITCH THEME BY LIGHT SENSOR



This option will enable the cluster to automaticlly switch between Daylight or Nigthlight color themes. When disabled the color themes should be manually selected by user using the Configuration Screen menu.

TRANSMISSION POSITION DISPLAY





This option will enable the cluster to display the transmission gear position (current gear), once this option is enabled the display will show the gear information at the bottom of the screen by using the current gear J1939 SPN from the transmission source address.

LOSS OF COMMUNICATION



This option will enable the cluster to report the CAN communication loss for any of the two Channels. The CAN loss notice will appear as a banner in the top of the LCD screen.

POPUP BANNER



This option will enable the cluster to display to report fault codes received from Engine, Transmission or Retarder. The fault codes notice will appear as a banner in the top of the LCD screen.

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The section Cluster Layout is unique for screens 1 - 5:

Advanced Cluster PC Tool		- 🗆 🗙
- I	👄 Read 🧪 Write 📒	Connected 🕛 Initialize 😃 Relea
ings Selap		
orfigure Display Inputs Gauge Sources Warning Lights Output Ouster Config		
Solech Joon Screen 1 Screen 2 Screen 3 Screen 4 Screen 5 William		
Cluster Layout	Show Options	
3 Gauge ····	Caringuration Screen Timeout	
Independent	Transmission Postion Display	
	✓ Coss of ContrainCastor	
A service of the serv		
O% OMPA O	196 () · · · ·	
	13	
Real PM D 🛄 Manufar	.87/29/2021	

Up to **5 different screens** can be enabled by user, screen 1 is always enabled by default, screens 2 to 5 can be optianally enabled. Each screen can be configured to one of four different **layouts** from the drop down menu. The instrumentation of each layout is discribed in the following sections.



A common feature for all layouts is the Odometer/Tip Odometer/Total Hours at the center bottom of te layout. User can select a different option for each enabled screen.

DIGITAL



Digital layout contains five digital gauges, that can be assigned to any of the Gauge Sources using the dropdown menu at the top of each gauge.

Image: Constant </

Analog layout contains four bar gauges and one analog gauge, that can be assigned to any of the Gauge Sources using the dropdown menu at the top of each gauge.

ANALOG

3 GAUGE



3 Gauge layout contains three analog gauges, that can be assigned to any of the Gauge Sources using the dropdown menu at the top of each gauge.

SINGLE



Single layout contains one analog gauge, that can be assigned to any of the Gauge Sources using the dropdown menu at the top of each gauge

8.1.4 Video

On models with video input, such as maxAI 430v and maxAI 430iv, got the option to configure to display Video from an external camera.



The video can be enabled using the checkbox indicated in the image above.

Video Swite	ch Options	Video Swit	ch Options	Video Swite	ch Options
Signal	Transmission Current Gear	Signal	Transmission Current Gear	Signal	Front Panel KeyPad
Source	CANO 🗸	Source	CAN1 🗸	Source	Key Pad 🛛 🗸
On	1 🜩	On	1	On	1
Units	Gear	Units	Gear	Units	Button

Each source option contains a Signal description, Source, On value and Units.

Signal

This field will briefly describe the signal that has been selected on Source field.

Source

This field contains a drop-down menu where the user can select one of the three configurable video switch Source options: CAN0, CAN1 or Keypad.

CAN0 and CAN1 will use the message configured in Miscellaneous Custom Parameters Selection in the corresponding CAN channel.

On

For **Source CAN0** or **CAN1**, **On** value can be selected by using the Physical Value. The Physical Values are determined by the **Operational Min** and **Operational Max** from Miscellaneous Custom Parameters Selection table.

	Sgr		SPN	Source Address	Threshold-Lo	Threshold-H	Off Mask	On Mark	Bink Mask	Units
•	Swtch Tran	mission Curren	t 523	3 0)	100	0	1	3	Gear
Mia	scellaneous	•			_		_	🕐 Repla	ce 🍤 Default	s 'S, Upda
Mi iPNe	scellaneous a & PGNa Signal	• SPN	Name	SPN	5PN Length	SPN Units	Operat	🕜 Replac	Ce S Default	s Ca Upela Data Me
Mis SPNs	scellaneous & 8 PGNa Signal Transmissio	• SPN	Name mission Curr	SPN Desctption	SPN Length	SPN Units	Operat Min -125	🕐 Replec	Ce 🕤 Default Operational Max	S (G, Upoli Data Min -125

For **Source Key Pad**, **On** value is fixed to 1 (second button from left to right)

Units

This field will display the units of the Source signal.

8.2 Tab 2 – Inputs

C Tool							-	- 🗆
					🖶 Read	🥖 Write 🛛 📒 Cor	inected ()	nitialize 🛈 Rel
Gauge Source	s Warning Lights	Output Ouster	Contig					
							Add	Remove
Туре	Ran	ge						
						Part Number	Add	Berroze
0%	25%	50%	75%	100%	Range			- Development America
	100000			u		Pat Number	Add	Remove
0%	25%	50%	75%	100%	Range			
								199220
							(Add	Renova
100%	Range							
100%	Range							
100%	Range						Add	Remove
	C Toel 57. Gauge Source Type 0%	C Tool 5 Gauge Sources Warring Lights Type Ran 0% 25% 0% 25%	C Tool 9 Gauge Seurces Warring Lights Dutput Dutput 1ype Range 0% 25% 50% 0% 25% 50%	C Tool 9 Gauge Sources Wanting Lights Dutput Outer Contig 1 Type Range 0% 25% 50% 75% 0% 25% 50% 75%	C Tool 9 Gauge Sources Warring Lights Dutor Config 1ype Range 0% 25% 50% 75% 100% 0% 25% 50% 75% 100%	C Togl	C Tool ← Red / Wirk Con © Gauge Sources Warking Lights Output: Out	C Tool ↔ Reed / Virik Connected (1)

There is a total of **six** configurable inputs to the cluster, these are non J1939 inputs. Inputs **one through five** can be configurable as **Digital**, **Resistance**, **Voltage** or **Frequency**; input **six** can only be configured as **Current**.

Num	nber	100%		R	ange	8								
2	÷.	20000	-	10-20'000	Hz									
rent														
rerk													Add	Remo
Num	nber	0%		25%	6	50%	0	75%	8	100%	6	Range	BbA	Reno

Drop down menus will have either a **bold blue** or **bold yellow** outline. The **bold blue** outline indicates that more options available. The **bold yellow** outline indicates only one option is available.

8.2.1 Digital

			Add
Number	Туре	Range	\bigcirc
e a Digital in Digital	put, click on Add	1 button.	
re a Digital in Digital	put, click on Add	l button.	Add
e a Digital in Digital Number	put, click on Add Type	l button. Range	Add

Once the input is added the input **Number** and the **Type** can be changed. Any **Number** that is not assigned to any other input can be selected. The **Type** can be selected as **Active High** or **Active Low**. The **Range** column will display the voltage level that are used for **Digital** inputs. The **Remove** button will remove the last input in the **Digital** list.

8.2.2 Resistance



To configure a **Resistance** input, click on **Add** button.

												Part Number	Add	Remove
Number	0%		25%		50%		75%		100%		Range			
1~	0.0	*	1250.0	*	2500.0	+	3750.0	-	5000.0	-	0-5 KOhm,Slope +			

Once the input is added the input Number and the Resistance Interpolation Table can be changed. The Range column will display the resistance values that can be used for Resistance inputs.

art Numbers			Input to Se	et	
100438	~		1	~	Set Profile
0%	25%	50%	75%	100%	Range
240	153	103	70	33	0-5KOhm

The **Part Number** button will pop up the **Part Number Profiles** window. In this window the **Part Numbers** drop down menu will contain pre-set resistance interpolation tables that can be assigned to a **Resistance** input by selecting the corresponding input number from **Input to Set** dropdown menu and clicking **Set Profile** button.

The Remove button will remove the last input in the Resistance list.

8.2.3 Voltage

Number 0% 25% 50% 75% 100%	Range	
----------------------------	-------	--

To configure a Voltage input, click on Add button.

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							Part Number	Add	Remove
Number	0%	25%	50%	75%	100%	Range			
1 ~ 0.0	000 🖨	8.000	16.000 🖨	24.000	32.000	0-32 VDC,Slope +			

Once the input is added the input Number and the Voltage Interpolation Table can be changed. The Range column will display the voltage levels that can be used for **Voltage** inputs.

Part Numbers			Input to Se	et	
123495	~		1	~	Set Profile
0%	25%	50%	75%	100%	Range
1	1.75	25	3.25	4	0-32 VDC

The Part Number button will pop up the Part Number Profiles window. In this window the Part Numbers drop down menu will contain pre-set resistance interpolation tables that can be assigned to a Voltage input by selecting the corresponding input number from Input to Set dropdown menu and clicking Set Profile button.

The Remove button will remove the last input in the Voltage list.

8.2.4 Frequency

requency			Add Remove
Number	100%	Range	
e a Voltage inj Frequency	put, click on	Add button.	Add Remove
Number	100%	Range	
The second se			
	Number e a Voltage in Frequency Number	Number 100% e a Voltage input, click on . Frequency Number 100%	Number 100% Range e a Voltage input, click on Add button. Frequency Number 100% Range

Once the input is added the input Number and the 100% frequency can be changed. Any Number that is not assigned to any other input can be selected. The 100% frequency will indicate the frequency that will be considered as 100% input value. The Range column will display the frequency rage that are used for Frequency inputs.

The Remove button will remove the last input in the Frequency list.

8.2.5 Current

6

~ 4.000

\$ 8.000

								Add Remove
	Number	0%	25%	50%	75%	100%	Range	
-	0	. 11 1	A 111		1 6			
configure	e a Current inp	out, click on .	Add button.	Only input 6 c	can be config	ured as Curre	nt input.	
configure	e a Current inp Current	out, click on .	Add button.	Only input 6 c	can be config	ured as Curre r	nt input.	
configure	e a Current inp Current	out, click on .	Add button. (Only input 6 c	can be config	ured as Curre r	nt input.	Add Remove

Once the input is added the Current Interpolation Table can be changed. The Range column will display the current values that can be used for Current inputs.

20.000

+4-20 mA,Slope +

\$ 16.000

\$ 12.000

8.3 Tab 3 – Gauges Sources

Compare Uniplay inputs On-S	e Sources Warning L	ights Output C	Lutter Config	3		
Signal	Source	Display	LO-Limit	Display HI-Limit	Units	
Fuel1	CHA	- 0	12	10)	2	
DEF Leve	C98	V 0	(\$)	100 (5)	3	
Eluko Man	CAN	40	\$	410 🔤	'F	
FingDI	CAN	- D	÷.	125 🔄	P.SI	
BrakeSec	CRN	- P	12	00 (2)	PSL	
BrakeFri	639	V 19	-l\$I	80 (¢)	PS	
Tranfo	CAN	v 0	0	583 💠	P51	
EncCoolent	CAN	J 40		410	۲F	
Eng0#1	CA4	-455	阑	3154 😭	T.	
Aux Temp1	C98	-41	 \$	410 (0)	Ŧ	
TranAll	C/24	- 459	0	3154 📳	'F	
Bartary P I	CAN	V 0		18 📳	v	
VerSpeed	CAN	- P	1	15) 🔄	MPH	
Engligheed	CAN	V 0	(¢)	3000 14/	EPM	
Anneta	None	V 10	0	40 🔅	A	
En Trap F. el	CAN	0	2	100	Gal	
Englithe	CAN	4 0	1	20	Gsl/11	

Each instrument setup under the **Configure Display** tab will require a signal source. This source will be selected under the **Gauge Source** tab. Some instruments, such as **Engine Trip Fuel** and **Engine Fuel Rate** are driven by CAN signal only. These instruments, along with instruments on the list that were not configured to a screen, will not allow source selection. The **Lo-Limit** and **Hi-Limit** to be displayed must also be set under this tab.

construction of the second	te Sinumer, Warning Ligh	te Output Cluster Carfs	1		
Signal	Source	Display LO-Limit	Display III-Limit	Units	
Eadl	LAN	0 <u>N</u>	103 🔮	2	
DEE Level	CAN .	0 団	103	(d).	
Intake Mar	CAN .	40 [원]	4:0	4	
EngOl	CAN	0 (0)	125 5	291	
BrakeSee	CAN	0 🔄	80 (5)	P9)	
BrakePri	CAN .	0	81 🔮	P9)	
TranaOi	CAN -	0 😒	503	951	
EngCoolem	CAN .	-10 (a)	410 [2]	Ŧ	
Eng0(1	CAN .	450 (5)	3154 [0]	Ŧ	
Aux Temp 1	EAN .	41 (\$	410 (4)	76	
TransOi I	EAN .	459 🛃	3154	7	
Bettery P1	CAN .	0	18 🛓	×	
VerSpeed	CAN .	0	150	MEH.	
EngSpeed	CAN v	0 [5]	0000	HPM	
Anometer	None v	0 (0)	40 (5)	3	
EnTropFuel	EAN	0 0	100 🕼	6.0	
EngFRee	EAN .	0	20	Gal/H	

For each instrument selected, select the signal source. This can be CAN signal or one of the input signals set up under the **Inputs** tab. Once the source is selected, set the **Display Lo-Limit** and **Display Hi-Limit** to be shown on each instrument.

8.4 Tab 4 – Warning Lights8.4.1Warning Lights: LED

-									65 R:	ad 🥖 Write 🥘	Connected	(1) Initial de	(D B
tinus	Solup											-	
ugino	e Utsplay Imputs Gauge Si	uroes I Warni	ng Ught	Output Custer Co	ntig								
LED	LCD												
	Signal	Sou	rce	Ihreshold-Lo	Ihresh	old-Hu	Units	Enable		Logic			
1	ABS/EBS Anber	CAN		1 🗄	100	4	states /258	0e		THE			
2	Low Fuel	CAN	- 4	<u>لا</u> ا	100	4	states/208	Un	14	TIME	1		
3	Hydraulie Ol. Temp	CAN		U \$	100	(2)	states/400	De	v	TIME			
4	Bigre Gi Pagada	EAN	~	¢ \$	100		states/2nt	De	-0	TROUG			
5	Hydraulic Filter Pre	CAE		a	101	25	states /2:4	0n	~	TIME	10		
6	Abernator Char Fall	EAN	~	0 \$	100		states/201	Οn		TIME			
7	Wat to Stat	CAN		Q: 0	102	1	states/251	Dn:		TIM			
8	Engree Mallanction	CAN		ā. ‡	100	14	1440723	Do	-	TICLE			
9	Hydraulic Pres Breke	CAN	1.94	1 4	100		states.2:4	0n	~	TACHE			
10	Tum Signal Left	CAN	N.	V 🄄	100	4	states/258	Un		TRACE			
11	Tem Signal Right	EAN	×	ų. ÷	100	4	1415/201	De		TIME			
12	Parlong Balan	EAN		a 🔹	100	1	:del:0/2:4	Dn	×	TICUS			
13	Exhaum System Clean	DAN	1	0 :	100	1	states/258	0n		TIME			
14	Regen inhibit	CAN	14	U (1)	100		states/201	Un		TIME			
15	High Exhaust Temp	CAN	. v	Q (\$)	100	4	states-301	Dn	14	TIME			
16	DEF Level	CAN		û	100	10	statio/3nt	Der	-	TICLE			
17	Trans Of Pressure	CAN	- Ste	0	580	15	PS	0n	×	TRUE			
18	Transmission OII Temp	CAN	~	0 0	100		states/4pt	0n	14	1112-111			
19	Engine Costant Temp	CAN	×	a: (c)	100	12	states/454	Dn	- 08	TRACK			
20	Brights Contard Local	CAN		¢ ۵	100	*	8	Der	- 9	TICIE			

The maxAI 430i and maxAI 430iv are equipped with 20 individual telltale LED warning lights. Similar to the gauge source, the LED warning light signal source will be selected under the **Warning Lights: LED** tab. The limit values must also be defined so the light will respond as desired.

Adv	moed Cluster PC Tool								- 1	×
1-							69 F	cad 🥖 Write 🤇	Connected () Hittifee	() Relaz
tings	Setup	10-		4						
philiput	e Ulapley Inputs Gauge Sc	surces 1 Warna	ng Ugn	S Output Dutter Co	gila					
LED	LCD	11.4	-		1200		-	1 1		
#	Signal	Sou	ce	Ihreshold-Lo	Chreshold-Hit	Units	Enable	Logic		
1	ABS/EBS Arber	CAN	X	<u>e</u>	100	efstee 755	On ~	CANCE.		
2	Low Fuel	CAN	~	P. 🔅	100 ÷	states/254	0n v	TT:20		
3	Hydraulia Oli Temp	CAN	4	u, c.	100 (‡)	states/408	Da u	III. III		
4	Bright Of Planets	EAN	4	a 🗘	100 🛊	shiku/2;rt	De v	100 C		
5	Hydroulic Filter Fre	CAN		a. ÷	101 😒	states/2ct	On ~	THE STATE		
6	Alternator Oter Fall	CAN		0	100 😴	states/2:4	Sh 😪	TIME		
7	Wat to Start	CAN		Q. 2-	100 🔹	states/251	De 🗸	THE		
8	Fright: Malancian	EAN		0 ¢	100 \$	36469/251	Dn 🔍	11.18		
9	Hydroudic Pres Rooke	CAN		n' ÷	100 \$	states/25t	On 👒	TTA: THE		
10	Tum Signal Left	CAN	~	0 4	100 🛟	states/251	On ~	TEL:MAN		
11	Tum Signal Right	CAN		u	100 [2]	states/251	Do ~	TT: TH		
12	Palling Balco	EAN		a	100 (‡)	status/2nt	Dn V	11.18		
13	Exhaurt System Clear:	CAN	v	o ;	100 1	states/2:4	On v	TIL:		
14	Regen Inhibit	CAN	10	n :	100 2	states/2:1	On ~	TT: THE		
15	High Exhaust Temp	CAN	14	ų. (č.)	100 (\$	states/354	On 🤍	TITER		
16	DEF Level	CAN		u 61	100 \$1	14.4.2/3/1	3n ~	TITLE		
17	Trans Di Pressue	CAN		0 10	580	PSI	On ~	1115.110		
18	Transmission Of Terro	CAN		0 3	100 :	dates/dat	De >	THEFT		
10	Eccine Cooled Leve	Cak		U 2.	100	abatana / dr.W	0e	TITI		
-90	Bener Color Iner	TAN		a é	100	N		TITI		
20	Multiple costals score	Lin				10	Deur .	(Laborate)		

For each LED warning light, select the signal source. This can be CAN signal or one of the input signals set up under the **Inputs** tab. Once the source is selected, set the **Threshold-Lo** and **Threshold-Hi** limits to trigger each LED warning light. The **Enable** column will give three options: **On**, **Off** and **On Ign Off**, the last option will allow to turn On the LED warning light when ignition is Off, the Display will remain

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off but the LED warning light will illuminate, this functionality will increase the current consumption of Ignition Off functionality.

•	WATER D								b. 7.0	ad / Write	Connected	1 O Inite	lue (9
inga	octup	There	Tat	Toma mane	-0-									
01	100	1000 C	20.20	.) colta casa co										
#	Signal	Sou	-	Threshold-Lo	Threshold	łlij	Units	Enable		Logic				
1	ABS/EBS Anton	CNI	×	ő. :	100		states/2nt	Cn.	- 94	TITU	1			
z	Low Reel	CAN		ð (†	100	+	states/2:1	On .	4	TIME				
3	Hydraulic Oil Temp	CAN		ð. 🔅	100	1	states.Mrt	On	3	TRACES				
4	Engine OII Pressure	CAN	~	0 4	103	Ċ.	states/2bt	On	÷	CO.L.B				
5	Hydraulic Hiter Pre	CAN	~	Q. 4	102	12	sizies/2bit	Cn	×	TROUB				
6	Alternator Char Rat	C/91		0 0	105	10	states/2m	On	×	TICLE				
1	Wat to Start	CAN	*	0	100	12	states/Brt	On	÷	TICLE				
8	Englise Malfunction	CAN	×	R: (†	100	4	states/7ts	0n	×.	TRACE				
9	Hydraulic Pres Brake	CAN	. 9	() (†	100	4	dates/2bt	On	2					
10	Tum Signa Let	CN8	X	1	100	4	states/2bit	Øn	×	TRACE				
11	Tun SgnJ FigM	C-9N	×	e ;	100.	4	ofates/2st	Cn	- 20	11:0				
12	Parking Brake	CAN	Y	0. ¢	103	4	status/2rt	On	4	11713				
13	Eshwart System Clean	CAN	4	ð 🔹	103	*	steles/7tt	Ön		TINE.				
14	Regen Inhibit	CAN	4	\$7 (A)	103		etstes/2bt	On	-	1107128				
15	High Exhaust Temp	CAR	~~	0	10)	30	states/3bt	On	×	TRACE				
18	CEF Level	CHI	×	Ø. \$	100	-4	sistes/3st	On	×	TI::LB				
17	Trans Of Pressure	CAN	1.00	0	580	\$	PSI	On	×	CI. LB				
18	Transmission O/ Terro	CAN	2	P: \$	100	12	states/@it	0n		11.11				
19	Engine Coolent Terrat	CAN	2	() ()	103	-	dates/fbt	Ôn	×	TRACE				
20	Engine Coolant Level	CAN	14	10 (±)	100	令	*	On	v	TRALE				

The logic function determines how the threshold values will function. **Logic High** means that the LED warning light will turn on when the value reaches the high threshold while ascending. The LED warning light will not turn off until the value reaches the low threshold while descending. Alternately,

Logic Low means that the LED warning light will turn on when the value reaches the low threshold while descending. The LED warning light will not turn off until the value reaches the high threshold while ascending.

Example:

If you wish to set the oil pressure LED warning light to turn on when the oil pressure goes below 10 PSI,

select Logic Low and set Threshold-Lo to 10 PSI. The LED warning light will only come on when oil pressure drops below this value. Threshold-Hi is also necessary to set. Once the oil pressure goes back up, the light will not turn back off until the pressure exceeds the value set in Threshold-Hi. If this value is set to 15 PSI, the oil pressure LED warning light will remain on until the oil pressure exceeds 15 PSI.

8.4.2 Warning Lights: LCD

ngan dalam perintenan sana Re							distances and
- Setup					60 16	ted y white Gouvernes	Concores Or
iga sonap dinana Dankar Januar Carina Car	www.Warring he	the Change Changes Co	-				
n ICD	1000 CONT 200	CLEAR CAUSE CO	10				
# Signal	Source	Threshold-Lo	Threshold-tli	Units	Enable	Lonis	
1 ABS/EBS Arbar	CN	0	105 \$	data/2d	Du v	TITLE	
2 Low File	CAN -	D	102 *	states/2:4	Dn v	TL: TH	
3 Hydraulic Of Tents	C.4/4	6 3	100 😳	states./4pt	0n 🛩	THE R.	
4 Engine OII Pressure	CAR	0 5	100 5	states/201	On 👻	TROUB	
5 Hydraulie Filter Pre	C/M >	0 2	100 \$	states-254	Dn 🗸	TICU	
6 Alianator One Ref.	CAN	0. 0.	100 4	states/24	Der 🗠	TICKE	
7 Wat is Start	CAN	0	100 3	states/2st	Dn v	TAUXE	
8 Engre Malfunction	CA/4 ->	0	100	states/2:4	0n 🖂	TRUE H	
9 Hydraulio Pres Brake	CAN >	e 0 (2)	100 5	states/254	On 🗸	TREE	
10 Tun Sgna Lott	CAR N	0 (a)	100 \$	33:5/20	Dn 🗸	TT::UB	
11 Turn Signal Fight	C/N ·	0 2	105 🛟	didas/2d	Du v	TT: TH	
12 Parking Books	CAN	0	102 3	states/258	Dn ~	T1:28	
13 Exhaust System Cean	CA/4 >	0	100 🤤	states/201	0n ~	TRUCE	
14 Reget Inhibit	CAR	¢ \$	100 2	states/201	On v	TROLE	
15 High Elihaust Temp	C/N >	0 0	100 -1	states/308	Dn 🗸	TICLE	
16 DEF Land	CAN S	0 \$	100 \$	didus/306	De ~	TICKE	
17 Transmission Of Press.m	CAN	P 対	580	PS	On v	T1://18	
18 Transmission (II Temp	CA/4 >	e (2)	100. (12	states/458	Ən 🖂	THE OWNER	
19 Engine Coolant Terro	CAN >	() (‡	100 3	states/458	On 🗸	TICLE	
20 Engine Coolard Level	CAR S	U (4)	102 0	8	Dn 🗸	TICH	
21 Hydraulic Rud Bulks	C/N	0 21	100 :	A.d. 10/24	De v	T1	

LCD warning lights work similar to LED Warning Lights, but instead to be connected to a LED light, these warning lights will be displayed as a pop up in the display. LCD warning light signal source will be selected under the **Warning Lights: LCD** tab. The limit values must also be defined so the light will respond as desired.

							en P	and States in Factor	test the new street of the part
	Solue								
inigin	e Usplay Inputs Gauge Sou	roes Warni	ng Ugh	B Output Dutter Co	nlig				
LED	LCD								
	Signal	Sou	rce	I hreshold-Lo	Threshold-Hi	Units	Enable	Logic	2
1	ABS/EBS Anter	CAN	¥	n 🔅	100 2	elsiee/25t	On ~	TRUCE	
2	Low Foel	CAN	1	a 🔹	100 ;	states/201	0n 😪	T1:728	
3	Hydraulic Ol: Temp	CAN		u 5	100 \$	states/4at	Dn U	TI::U	
4	Brane Ol Pusson	EAN	~	u \$	100 ‡	status/2:1	Dn ~	TRANK	
5	Hydroudic Filter Free	CAN		0 ÷	100 2	zistes/2:1	On ~	TICHE	
6	Atemator Oter Fall	CAN		0	100 😴	states/251	0n v	TIME	
7	Wat to Start	CAN		0 2	100 3	states/2st	Dn 😔	TICOR	
8	Erignic Waltaristion	EAN	- 44	a ¢	100 \$	status/2:1	Dn 🔍	T1::1H	
9	Hydraulia: Pres Realize	CAN		n' 🔹	100 3	states/2:0	On v	TIL: THE	
10	Tum Signal Left	CAN	×	0 4	100 \$	states/201	0n ~	TEL:22H	
11	Tum Signal Right	CAN		ų (100 \$	states/258	Do 🗸	TITLE	
12	Parleng Bake	CAN		0 ¢	100 👙	shidaa/251	Din 🗸	TITI	
13	Edward System Clean	SAN	×	đ 🛫	100 2	alaten/751	Da v	TICE .	
14	Regen Inhibit	CAN	10	a 🗧	100 🔅	states/201	Dn 🗸	TIME.	
15	High Exhaust Temp	CAN	4	u (*)	100 (¢	states/354	On v	TITE	
16	DEF Level	CAN	~	u \$	100 \$	14.4.a/3ri	Dn 🕓	TICLE	
17	Transmission Of Pressure	CAN	19	0	580	PSI .	On v	1115.718	
18	Transmission OI Temp	CAN	190	() ()	100 🔅	dates/454	0n ×	TIC: III	
19	Engine Coolant Temp	CAN	×	U	100 🔅	states/4pt	On 🗸	TRANS	
20	Bright Coolant Lovel	EAN	. *	0 \$	100 🗳	8	Dn v	TIME	
21	Hydroulic Ruid Brake	CAN		a 🔹	100 \$	states/2:4	De v	TIL: THE	

For each LCD warning light, select the signal source. This can be CAN signal or one of the input signals set up under the **Inputs** tab. Once the source is selected, set the **Threshold-Lo** and **Threshold-Hi** limits to trigger each LCD warning light. The **Enable** column will give two options: **On** and **Off**.

Adu	incud Cluster PC Tool								- 1
- 1							66 I	icad 🦯 Write 📃 Conno	sted 🕛 Initiation 🕛 Rel
ettings	Setup								
Configu	e Display Inputs Cauge Sou	iter Wate	ng Light	 Output ClusterCo 	rflg				
LED	LCD								
#	Signal	Sour	C.	Threshold-Lo	Threshold-Hi	Units	Enable	Logic	
1	ABS/EBS Arriber	CNI	1	0	100 \$	states/2st	On v	11.11	
2	Low Reel	CAN		0 ÷	102 ‡	states/2:1	On in	13728	
3	Hydraulic Oil Temp	CAN	1	ð: 🗧	105 👙	states.Act	On 👇	TRATE	-
4	Engine OII Pressure	CAN	~	0. (÷	100 0	states/2bt	On 🗠	TT.	
5	Hydraulic Hilter Pre	CAN	V	0. 4	102 2	sizies/Zot	On N	TRACE	
6	Alternator Char Rat	C/11	*	¢:	105 \$	states/2st	on x	TICLE	
1	Wat to Start	CAN		0	100	states/Brt	On >	TRUCK	
8	Engra Mallunction	GAN	12	R: 2	100 🖓	idates/7tt	On 🔗	TT: THE	
9	Hydraulic Pres Brake	CAN		() (†	100 🗘	dates/2bt	On v	TRACE	
10	Tum Signa Lett	C248			10) 4	states/2bit	On v	TR: LE	
11	Tun Sand Fight	C.M	×	e :	100 \$	states/2st	On v	TTC:U	
12	Parking Brake	C/N	4	5 ¢	103 👙	status/2ri	On Y	13.10	
13	Eshaust System Clean	CAN	-	ð 🔅	100 🔆	stetes/ht	On v	TIME	
14	Regen Inhibit	CAN	- 4	¢7 (4)	100	states/2bt	On ~	CONTR.	
15	High Exhaust Temp	CAN	~~	0. 2	10) [3	states/3bt	On 🔗	TRACE	
18	CEF Lovel	C/N	~	0. 4	105 .\$	sidics/3bt	on ×	TICU	
17	Transmission Of Pussauro	CIN		0	580 🕼	PSI	On ×	TITLE	
18	Transmission O/ Terro	CAN		0. 0	100 2	states/@ir	On .	TITLE.	
19	Engine Coolent Terra	CAN			103	dates/fbt	On v	TRATER	1
20	Engine Coolant Level	CAN		0	100	T.	Un v	TANKE	
24	Harten die Ehrich Benker	1.411	2	16	107 2	A	00	TT-TH	7

The logic function determines how the threshold values will function. **Logic High** means that the LCD warning light will turn on when the value reaches the high threshold while ascending. The LCD warning light will not turn off until the value reaches the low threshold while descending. Alternately,

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8.5 Tab 5 – Output

	- 0
	↔ Read 🧪 Write 🥌 Connected 🛛 🕛 Initiation 🕕 Bet
ings Selap	
onfigure Display Inputs Gauge Sources Warning Lights Turper Quater Config	
Gulput T	
Type Activated by	
Disable v DM1 Amber Warning Light v	

The maxAI 430i is equipped with one digital output. This output can be disabled or set to Low Side (switch to ground) or High Side (switch to battery.) The output is triggered by the CAN DM1 Amber Warning Light, DM1 Stop Light, or Either.



Select the output type and activation type for the digital output.

8.6 Tab 6 – Cluster Config

The **Cluster Config** tab allows the user to read/write the configuration to the maxAI 430. This tab also allows the user to load/save PC Tool configurations, and to update firmware in maxAI 430.

8.6.1 **PC File**

	Acheanced Cluster PC Tool			- T X
	m -		69 Read 🥒 Write 📒 Connected	() Initialize () Release
	Setinge Setup			
	Configure Display Inputs Gauge Sources Warning Licht	s Output (Ouster Config.)		
	PC File	Cluster	Firmware	
	Open Save Save /s	Read	Open Write Splash	
fool configuration can be s	tored and retrieved in a xml fil Advanced Cluster PC Tool	le. To save the config	guration, click on Save assign a ex Rad Nutle Deconsted	an anne click on × C Intuiter O Relasse
	Contra un Diseñas - Ina da - Causa Saurasa - Warring Listet	· Come (Cluster Cortin)		
	Coor Save Save As	Cluster Read Witte	Timwere Open Write Splash	

To load the configuration, click on **Open** and select the corresponding xml file.

8.6.2 Cluster



Before reading or writing the configuration to the maxAI 430 display, confirm that Configuration Software is connected to the maxAI 430 display by looking for a green light at the top of the screen. Once connection is confirmed, click on the **Read** button to read the current cluster configuration or **Write** button to write the new configuration to the cluster. When the configuration transfer begins, the progress will be indicated at the upper left-hand corner of the screen. Writing can also be performed from any screen by selecting **Write** on the bar at the top of the screen.



Read Settings indicator.



Write Settings indicator.

maxAI CONFIGURATION SOFTWARE MANUAL

- 65.1 File - Fi			HE 222
Write SPNsPGNs	Time Dav 14.402s	🚓 Read 🥒 Write 🛛 🥌 Conn	ected 🕛 Initialize 😃 Release
Settings Solup			
Configure Display Inputs Gauge Sources Wa	ning Lights Dutput Cluster Config		
PC file	Ouxer	Rmware	
Open Save Save Aa	Read WWW	Open Willie Sylads	
	Transfer Done	×	
	Write Complete Please Cycle Igniti	an Switch	
	E E	OK	

Once the transfer is complete, the Configuration Software will indicate completion with a pop up screen indicating the completion. Click OK and cycle power on the maxAI 430i display.

8.6.3 Firmware



The maxAI 430i firmware can be updated through the **Cluster Config** tab. To update the firmware, select Open and select the firmware file located on an accessible drive.



Once the firmware is selected, it will indicate that the firmware is ready to write in the lower left corner. Select **Write** to begin writing the firmware.

Rev Q 8/29/2021

Image State State Write Connected Opentations Opentations	Whater care is wor			/
Inger State Profeese Depty I pada Gouge Sources Warming Lights Outsid PC Tie Coort Save Save Air Parad Wite: Open Wate Splash Firmware -175383 (VIDT) DBD_004_007.srec Lassing 22786 bytes starting at 0005000h Lispest time: 00.06 Cancel	1.		🖶 Read 🥖 Write 📔 Connecti	ed () Initialize () Rele
Proverse Doom Save Save As Read Wee Open Wee Spaan Firmware Firmware 125389 (V007 (000 (004 (007.mec.) Engine 2006 bytes starting at 0005000h Elapsed time 00.06 Cancel	linge Setup			
PC Fler Coor Save Save As Cuter Presd Web Open Wete Space	orfigure Display Inputs Gauge Sources Warning	Lights Output Cluster Config		
Open Saye Save //a Paired Write Open Write Spash	PC File	Cluster	Firmware	
Formware -125389 (V001,000,004,001.steec Ensing 32786 bytes starting at 0005000h Elapsed time: 00.06 Cancel	Open Save Save As	Read Wite	Open Write Splash	
Formware - 125380 (1001,000,004,007,srec. Ensing 32768 bytes starting at 0005000h Elspised time: 00.06 Cancel				
Formware -12388_VB01_000_004_007.srec Ensing 32788 Bytes starting at 08055000h Elspsed time: 00.06 Cancel				
Formware -125830_U001_0001_004_007.vrex Ensing 32788 bytes starting at 0005000h Elapsed time: 00.06 Cancel				
Firmware -125889 (VDIT_DDI) 004_00T sinc Ensing 32780 bytes starting at 00055000h Elspsed time: 00.06 Cancel				
Ferminiare - 125380_V001_000_004_007.arec Enzing 32798 bytes starting at 08058000h Elepsed time: 00:06				
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Ensing 32788 bytes starting at 0005000h Elspsed time: 00:06 Cancel	Firmware -125339_V001	_000_004_001.srec		
Elspand time 00:06	Erasing 32760 bytes	starting at 08058000h		
Elspand time: 00.06 Cancel				
Elspaced time: 00.06			1	
	Elapsed time: 00:06		Cancel	
	-			

The write process will begin, and progress shown on the progress bar.

Advanced Cluster PC Tool				- 🗆 X
m 7		dia Read	i 🥒 Wille 🛛 🐻 Connects	ed (1) Initialize (1) Feles
Settings Setup				
Configure Display Inputs Gauge Sources Warni	ng Lights Output Cluster Config			
PC Ne	Ouster	Amware		
Open Save Save As	Read Wite	Open Wite	Splash	
Firmware - 125339_V	01_000_004_001arec			
Firmware update	completed successfully			
Element firmer (023		OK		
chopsed of the own	·			
Pregram Done				
Inter- stationality				

Once the firmware is finished writing to the cluster, select **OK** to exit the firmware update.

9 Supported PGNs

The following chart indicates the current list of available PGNs to be set in the Parameters. Functionality is based on broadcast on the CAN bus.

PGN	SPN	SPN Name	Units	Туре
0	518	Engine Requested Torque/Torque Limit	%	Status
0	695	Engine Override Control Mode	states/2bit	Status
0	696	Engine Requested Speed Control Conditions	states/2bit	Status
0	897	Override Control Mode Priority	states/2bit	Status
0	898	Engine Requested Speed/Speed Limit	RPM	Status
0	3349	TSC1 Transmission Rate	states/3bit	Status
0	4191	Engine Requested Torque (Fractional)	%	Measured
256	525	Transmission Requested Gear	Gear	Status
256	681	Transmission Gear Shift Inhibit Request	states/2bit	Status
256	682	Transmission Torque Converter Lockup Request	states/2bit	Status
256	683	Disengage Driveline Request	states/2bit	Status
256	684	Requested Percent Clutch Slip	%	Status
256	685	Disengage Differential Lock Request - Front Axle 1	states/2bit	Status
256	686	Disengage Differential Lock Request - Front Axle 2	states/2bit	Status
256	687	Disengage Differential Lock Request - Rear Axle 1	states/2bit	Status
256	688	Disengage Differential Lock Request - Rear Axle 2	states/2bit	Status
256	689	Disengage Differential Lock Request - Central	states/2bit	Status
256	690	Disengage Differential Lock Request - Central Front	states/2bit	Status
256	691	Disengage Differential Lock Request - Central Rear	states/2bit	Status
256	1852	Transmission Mode 1	states/2bit	Status
256	1853	Transmission Mode 2	states/2bit	Status
256	1854	Transmission Mode 3	states/2bit	Status
256	1855	Transmission Mode 4	states/2bit	Status
256	2985	Transmission Shift Selector Display Mode Switch	states/2bit	Measured
256	4242	Transmission Reverse Gear Shift Inhibit Request	states/2bit	Status
256	4246	Transmission Mode 5	states/2bit	Status

256	4247	Transmission Mode 6	states/2bit	Status
256	4248	Transmission Mode 7	states/2bit	Status
256	4249	Transmission Mode 8	states/2bit	Status
256	4255	Transmission Requested Launch Gear	states/4bit	Measured
256	5762	Transmission Load Reduction Inhibit Request	states/2bit	Status
256	7695	Transmission Auto-Neutral (Manual Return) Request	states/2bit	Status
34048	6730	Engine Fan 2 Requested Percent Speed	%	Status
34048	6874	Performance Bias Selection	%	Measured
34048	6881	SCR Operator Inducement Override Switch	states/2bit	Status
34048	7033	Heat Exchanger Debris Purge Inhibit Switch	states/2bit	Measured
34048	7034	Heat Exchanger Debris Purge Force Switch	states/2bit	Measured
34048	7436	Predictive Cruise Control Enable Switch	states/2bit	Measured
34048	7437	Predictive Cruise Control Deactivation Request	states/2bit	Measured
34048	7438	Predictive Cruise Control Maximum Positive Offset	Km/h	Status
34048	7439	Predictive Cruise Control Maximum Negative Offset	Km/h	Status
34048	7579	Elevated Engine Speed Allowed Switch	states/2bit	Measured
34048	7580	Aftertreatment Regeneration Engine Speed Allowed Switch	states/2bit	Measured
34048	7694	Transmission Auto-Neutral (Manual Return) Enable Switch	states/2bit	Status
34048	7759	Engine Stop-Start Disable Command	states/2bit	Status
34048	8148	Aftertreatment System Enable Command	states/2bit	Status
34048	8855	Active Shift Console Request	states/2bit	Status
34560	5793	Desired Engine Fueling State	states/2bit	Status
34560	6715	Engine Gaseous Fuel Supply Desired Pressure	КРа	Status
34560	6833	Engine Gaseous Fuel Usage Inhibited	states/2bit	Measured
34560	7829	Transmission Idle Governor Fueling Inhibit	states/2bit	Measured
34560	8614	Engine Shutdown Command	states/2bit	Status
49408	3069	Distance Travelled While MIL is Activated	Km	Measured
49408	3294	Distance Since Diagnostic Trouble Codes Cleared	Km	Measured
56832	988	Trip Group 1	states/2bit	Status

56832	989	Trip Group 2 - Proprietary	states/2bit	Status
56832	1211	Engine Build Hours Reset	states/2bit	Status
56832	3600	Steering Straight Ahead Position Reset	states/2bit	Status
56832	6218	Engine Spark Plug Secondary Voltage Tracking Reset	states/2bit	Status
56832	6219	Engine Ignition Control Maintenance Hours Reset	states/2bit	Measured
56832	6898	Bin Lift Count Reset	states/2bit	Measured
56832	6985	Tire Configuration Information	states/2bit	Measured
56832	6986	Tire Sensor Information	states/2bit	Measured
57344	986	Engine Fan 1 Requested Percent Speed	%	Status
57344	1653	Vehicle Limiting Speed Governor Enable Switch	states/2bit	Measured
57344	1654	Vehicle Limiting Speed Governor Increment Switch	states/2bit	Measured
57344	1655	Vehicle Limiting Speed Governor Decrement Switch	states/2bit	Measured
57344	1656	Engine Automatic Start Enable Switch	states/2bit	Measured
57344	1666	Automatic Gear Shifting Enable Switch	states/2bit	Measured
57344	1682	Battery Main Switch Hold Request	states/2bit	Status
57344	1683	Auxiliary Heater Mode Request	states/4bit	Status
57344	1684	Auxiliary Heater Coolant Pump Request	states/2bit	Status
57344	1685	Request Engine Zone Heating	states/2bit	Status
57344	1686	Request Cab Zone Heating	states/2bit	Status
57344	1691	Cab Interior Temperature Command	°C	Status
57344	1714	Operator Seat Direction Switch	states/2bit	Measured
57344	1856	Seat Belt Switch	states/2bit	Measured
57344	3695	Aftertreatment Regeneration Inhibit Switch	states/2bit	Measured
57344	3696	Aftertreatment Regeneration Force Switch	states/2bit	Measured
57344	5630	Park Brake Command	states/2bit	Status
61441	521	Brake Pedal Position	%	Measured
61441	561	ASR Engine Control Active	states/2bit	Status
61441	562	ASR Brake Control Active	states/2bit	Status
61441	563	Anti-Lock Braking (ABS) Active	states/2bit	Status

61441	575	ABS Off-road Switch	states/2bit	Measured
61441	576	ASR Off-road Switch	states/2bit	Measured
61441	577	ASR "Hill Holder" Switch	states/2bit	Measured
61441	969	Remote Accelerator Enable Switch	states/2bit	Measured
61441	970	Engine Auxiliary Shutdown Switch	states/2bit	Measured
61441	971	Engine Derate Switch	states/2bit	Measured
61441	972	Accelerator Interlock Switch	states/2bit	Measured
61441	973	Engine Retarder Selection	%	Measured
61441	1121	EBS Brake Switch	states/2bit	Measured
61441	1238	Traction Control Override Switch	states/2bit	Measured
61441	1243	ABS Fully Operational	states/2bit	Status
61441	1438	ABS/EBS Amber Warning Signal (Powered Vehicle)	states/2bit	Status
61441	1439	EBS Red Warning Signal	states/2bit	Status
61441	1792	Tractor-Mounted Trailer ABS Warning Signal	states/2bit	Status
61441	1793	ATC/ASR Information Signal	states/2bit	Status
61441	1836	Trailer ABS Status	states/2bit	Status
61441	2911	Halt brake switch	states/2bit	Measured
61441	7941	Railroad Mode Switch	states/2bit	Measured
61442	161	Transmission Input Shaft Speed	RPM	Measured
61442	191	Transmission Output Shaft Speed	RPM	Measured
61442	522	Percent Clutch Slip	%	Measured
61442	560	Transmission Driveline Engaged	states/2bit	Measured
61442	573	Transmission Torque Converter Lockup Engaged	states/2bit	Status
61442	574	Transmission Shift In Process	states/2bit	Measured
61442	606	Engine Momentary Overspeed Enable	states/2bit	Status
61442	607	Progressive Shift Disable	states/2bit	Status
61442	4816	Transmission Torque Converter Lockup Transition in Process	states/2bit	Measured
61442	5015	Momentary Engine Maximum Power Enable	states/2bit	Status
61443	29	Accelerator Pedal Position 2	%	Measured

61443	91	Accelerator Pedal Position 1	%	Measured
61443	92	Engine Percent Load At Current Speed	%	Status
61443	558	Accelerator Pedal 1 Low Idle Switch	states/2bit	Measured
61443	559	Accelerator Pedal Kickdown Switch	states/2bit	Measured
61443	974	Remote Accelerator Pedal Position	%	Measured
61443	1437	Road Speed Limit Status	states/2bit	Status
61443	2970	Accelerator Pedal 2 Low Idle Switch	states/2bit	Measured
61443	2979	Vehicle Acceleration Rate Limit Status	states/2bit	Status
61443	3357	Actual Maximum Available Engine - Percent Torque	%	Measured
61443	5021	Momentary Engine Maximum Power Enable Feedback	states/2bit	Status
61443	5398	Estimated Pumping - Percent Torque	%	Measured
61443	5399	DPF Thermal Management Active	states/2bit	Status
61443	5400	SCR Thermal Management Active	states/2bit	Status
61444	190	Engine Speed	RPM	Measured
61444	512	Driver's Demand Engine - Percent Torque	%	Measured
61444	513	Actual Engine - Percent Torque	%	Measured
61444	899	Engine Torque Mode	states/4bit	Measured
61444	1675	Engine Starter Mode	states/4bit	Status
61444	2432	Engine Demand – Percent Torque	%	Measured
61445	523	Transmission Current Gear	Gear	Measured
61445	524	Transmission Selected Gear	Gear	Status
61445	526	Transmission Actual Gear Ratio	Ratio	Measured
61448	1762	Hydraulic Pressure	КРа	Measured
61448	1763	Engine Hydraulic Pressure Governor Mode Indicator	states/2bit	Status
61448	1764	Engine Hydraulic Pressure Governor Switch	states/2bit	Measured
61448	2599	Fire Apparatus Pump Engagement	states/2bit	Measured
61448	6702	Fire Apparatus Okay To Pump Interlock	states/2bit	Measured
61448	6703	Hydraulic Pressure Governor Increase Switch	states/2bit	Measured
61448	6704	Hydraulic Pressure Governor Decrease Switch	states/2bit	Measured

61448	6705	Hydraulic Pressure Governor Idle Switch	states/2bit	Measured
61448	6706	Hydraulic Pressure Governor Preset Switch	states/2bit	Measured
61448	6707	Hydraulic Intake Pressure	MPa	Measured
61448	6708	Hydraulic Discharge Pressure Set Point	КРа	Measured
61475	4331	Aftertreatment 1 Diesel Exhaust Fluid Actual Dosing Quantity	g/h	Measured
61475	4332	Aftertreatment 1 SCR System 1 State	states/4bit	Status
61475	4333	Aftertreatment 1 Diesel Exhaust Fluid Actual Quantity of Integrator	g	Measured
61475	4334	Aftertreatment 1 Diesel Exhaust Fluid Doser 1 Absolute Pressure	КРа	Measured
61475	6595	Aftertreatment 1 Diesel Exhaust Fluid Actual Dosing Quantity (High Range)	g/min	Measured
61475	7524	Aftertreatment 1 SCR System 2 State	states/4bit	Status
61677	7745	Engine Start Request	states/2bit	Status
61677	7746	Engine Start Consent	states/3bit	Status
61677	7747	Engine Start Abort Request	states/2bit	Status
61677	7748	Engine Starter 1 Feedback	states/3bit	Status
61677	7749	Engine Starter 2 Feedback	states/3bit	Status
61677	7750	Engine Start Control Message Counter	states/4bit	Status
61677	7788	Transmission Shift Selector Requested Vehicle Direction	states/3bit	Status
61709	6885	Engine Fuel Valve 2 Differential Pressure	КРа	Measured
64561	7332	Aftertreatment Thermal Management Status	states/2bit	Status
64561	7440	Aftertreatment Active Regeneration Inhibited Due to Low Exhaust Pressure	states/2bit	Status
64561	7441	Aftertreatment Ambient Air Temperature	°C	Measured
64561	7502	Aftertreatment Engine Speed Increase request	states/2bit	Status
64561	7503	Aftertreatment Engine Load Request	states/2bit	Status
64561	7588	Aftertreatment Diesel Exhaust Fluid Heater Circuit Breaker	states/2bit	Status
64561	7606	Aftertreatment Diesel Exhaust Fluid Tank Volume	%	Measured
64561	7607	Aftertreatment Diesel Exhaust Fluid Tank Temperature	°C	Measured
64561	7899	Diesel Exhaust Fluid Quality Malfunction Evaluation Period Active	states/2bit	Status
64586	6915	SCR System Cleaning Lamp Command	states/3bit	Status

64586	6916	SCR System Cleaning Status	states/2bit	Status
64586	6917	SCR System Cleaning Inhibited Status	states/2bit	Status
64586	6918	SCR System Cleaning Inhibited Due to Inhibit Switch	states/2bit	Status
64586	6919	SCR System Cleaning Inhibited Due to Clutch Disengaged	states/2bit	Status
64586	6920	SCR System Cleaning Inhibited Due to Service Brake Active	states/2bit	Status
64586	6921	SCR System Cleaning Inhibited Due to PTO Active	states/2bit	Status
64586	6922	SCR System Cleaning Inhibited Due to Accelerator Pedal Off Idle	states/2bit	Status
64586	6923	SCR System Cleaning Inhibited Due to Out of Neutral	states/2bit	Status
64586	6924	SCR System Cleaning Inhibited Due to Vehicle Speed Above Allowed Speed	states/2bit	Status
64586	6925	SCR System Cleaning Inhibited Due to Parking Brake Not Set	states/2bit	Status
64586	6926	SCR System Cleaning Inhibited Due to Low Exhaust Temperature	states/2bit	Status
64586	6927	SCR System Cleaning Inhibited Due to System Fault Active	states/2bit	Status
64586	6928	SCR System Cleaning Inhibited Due to System Timeout	states/2bit	Status
64586	6929	SCR System Cleaning Inhibited Due to Temporary System Lockout	states/2bit	Status
64586	6930	SCR System Cleaning Inhibited Due to Permanent System Lockout	states/2bit	Status
64586	6931	SCR System Cleaning Inhibited Due to Engine Not Warmed Up	states/2bit	Status
64586	6932	SCR System Cleaning Inhibited Due to Vehicle Speed Below Allowed Speed	states/2bit	Status
64586	6933	SCR System Cleaning Automatic Initiation Configuration	states/2bit	Status
64586	6934	SCR System Cleaning Forced Status	states/3bit	Status
64586	7848	Aftertreatment 1 SCR System Conditions Not Met for Active Cleaning	states/2bit	Status
64712	5794	Feedback Engine Fueling State	states/2bit	Status
64712	5795	Engine Fueling Inhibit Allowed	states/2bit	Status
64712	5866	Engine Fueling Inhibit Prevented Reason	states/4bit	Status
64712	6333	Engine Gas Substitution Fuel Percentage	%	Measured
64712	6791	Engine Dual Fuel Mode	states/2bit	Status
64712	6896	Engine Fueling Inhibit Request Count	states/4bit	Status
64712	6897	Engine Fueling Desired Request Count	states/4bit	Status
64716	5758	Aftertreatment 1 Intake 1 Gas Sensor Power Supply	states/2bit	Status

64716	5759	Aftertreatment 1 Outlet 1 Gas Sensor Power Supply	states/2bit	Status
64716	5760	Aftertreatment 2 Intake 1 Gas Sensor Power Supply	states/2bit	Status
64716	5761	Aftertreatment 2 Outlet 1 Gas Sensor Power Supply	states/2bit	Status
64716	8146	Aftertreatment 1 Intake 2 Gas Sensor Power Supply	states/2bit	Status
64716	8147	Aftertreatment 1 Outlet 2 Gas Sensor Power Supply	states/2bit	Status
64773	5093	Engine Protect Lamp Data	states/2bit	Measured
64773	5094	Engine Amber Warning Lamp Data	states/2bit	Measured
64773	5095	Engine Red Stop Lamp Data	states/2bit	Measured
64773	5096	OBD Malfunction Indicator Lamp Data	states/2bit	Measured
64773	5097	Engine Brake Active Lamp Data	states/2bit	Measured
64773	5098	Compression Brake Enable Switch Indicator Lamp Data	states/2bit	Measured
64773	5099	Engine Oil Pressure Low Lamp Data	states/2bit	Measured
64773	5100	Engine Coolant Temperature High Lamp Data	states/2bit	Measured
64773	5101	Engine Coolant Level Low Lamp Data	states/2bit	Measured
64773	5102	Engine Idle Management Active Lamp Data	states/2bit	Measured
64773	5103	Engine Air Filter Restriction Lamp Data	states/2bit	Measured
64773	5416	Engine Wait To Start Lamp Data	states/2bit	Measured
64773	5470	Engine Fuel Filter Restricted Lamp Data	states/2bit	Status
64773	6202	Engine Control Module 1 Ready for Use Lamp Data	states/2bit	Measured
64773	6203	Engine Control Module 2 Ready for Use Lamp Data	states/2bit	Measured
64773	6204	Engine Control Module 3 Ready for Use Lamp Data	states/2bit	Measured
64773	6711	Engine Speed High Lamp Data	states/2bit	Status
64773	6712	Engine Speed Very High Lamp Data	states/2bit	Status
64773	6900	Vehicle Acceleration Rate Limit Lamp Data	states/2bit	Measured
64774	1847	Hill Holder Lamp Command	states/2bit	Status
64774	5087	Vehicle Battery Voltage Low Lamp Command	states/2bit	Status
64774	5088	Vehicle Fuel Level Low Lamp Command	states/2bit	Status
64774	5089	Vehicle Air Pressure Low Lamp Command	states/2bit	Status
64774	5090	Vehicle HVAC Recirculation Lamp Command	states/2bit	Status

64774	5091	Vehicle Battery Charging Lamp Command	states/2bit	Status
64775	3987	Compression Brake Enable Switch Indicator Lamp Command	states/2bit	Status
64775	5077	Engine Protect Lamp Command	states/2bit	Status
64775	5078	Engine Amber Warning Lamp Command	states/2bit	Status
64775	5079	Engine Red Stop Lamp Command	states/2bit	Status
64775	5080	OBD Malfunction Indicator Lamp Command	states/2bit	Status
64775	5081	Engine Brake Active Lamp Command	states/2bit	Status
64775	5082	Engine Oil Pressure Low Lamp Command	states/2bit	Status
64775	5083	Engine Coolant Temperature High Lamp Command	states/2bit	Status
64775	5084	Engine Coolant Level Low Lamp Command	states/2bit	Status
64775	5085	Engine Idle Management Active Lamp Command	states/2bit	Status
64775	5086	Engine Air Filter Restriction Lamp Command	states/2bit	Status
64775	5469	Engine Fuel Filter Restricted Lamp Command	states/2bit	Status
64775	6205	Engine Control Module 1 Ready for Use Lamp Command	states/2bit	Status
64775	6206	Engine Control Module 2 Ready for Use Lamp Command	states/2bit	Status
64775	6207	Engine Control Module 3 Ready for Use Lamp Command	states/2bit	Status
64775	6709	Engine Speed High Lamp Command	states/2bit	Status
64775	6710	Engine Speed Very High Lamp Command	states/2bit	Status
64775	6899	Vehicle Acceleration Rate Limit Lamp Command	states/2bit	Status
64800	4765	Aftertreatment 1 Diesel Oxidation Catalyst Intake Temperature	°C	Measured
64800	4766	Aftertreatment 1 Diesel Oxidation Catalyst Outlet Temperature	°C	Measured
64800	4767	Aftertreatment 1 Diesel Oxidation Catalyst Differential Pressure	КРа	Measured
64830	4360	Aftertreatment 1 SCR Intake Temperature	°C	Measured
64830	4363	Aftertreatment 1 SCR Outlet Temperature	°C	Measured
64891	3719	Aftertreatment 1 Diesel Particulate Filter Soot Load Percent	%	Measured
64891	3720	Aftertreatment 1 Diesel Particulate Filter Ash Load Percent	%	Measured
64891	5466	Aftertreatment 1 Diesel Particulate Filter Soot Load Regeneration Threshold	%	Status
64892	3697	Diesel Particulate Filter Lamp Command	states/3bit	Status
64892	3698	Exhaust System High Temperature Lamp Command	states/3bit	Status

64892	3699	Aftertreatment Diesel Particulate Filter Passive Regeneration Status	states/2bit	Status
64892	3700	Aftertreatment Diesel Particulate Filter Active Regeneration Status	states/2bit	Status
64892	3701	Aftertreatment Diesel Particulate Filter Status	states/3bit	Status
64892	3702	Diesel Particulate Filter Active Regeneration Inhibited Status	states/2bit	Status
64892	3703	Diesel Particulate Filter Active Regeneration Inhibited Due to Inhibit Switch	states/2bit	Status
64892	3704	Diesel Particulate Filter Active Regeneration Inhibited Due to Clutch Disengaged	states/2bit	Status
64892	3705	Diesel Particulate Filter Active Regeneration Inhibited Due to Service Brake Active	states/2bit	Status
64892	3706	Diesel Particulate Filter Active Regeneration Inhibited Due to PTO Active	states/2bit	Status
64892	3707	Diesel Particulate Filter Active Regeneration Inhibited Due to Accelerator Pedal Off Idle	states/2bit	Status
64892	3708	Diesel Particulate Filter Active Regeneration Inhibited Due to Out of Neutral	states/2bit	Status
64892	3709	Diesel Particulate Filter Active Regeneration Inhibited Due to Vehicle Speed Above Allowed Speed	states/2bit	Status
64892	3710	Diesel Particulate Filter Active Regeneration Inhibited Due to Parking Brake Not Set	states/2bit	Status
64892	3711	Diesel Particulate Filter Active Regeneration Inhibited Due to Low Exhaust Temperature	states/2bit	Measured
64892	3712	Diesel Particulate Filter Active Regeneration Inhibited Due to System Fault Active	states/2bit	Status
64892	3713	Diesel Particulate Filter Active Regeneration Inhibited Due to System Timeout	states/2bit	Status
64892	3714	Diesel Particulate Filter Active Regeneration Inhibited Due to Temporary System Lockout	states/2bit	Status
64892	3715	Diesel Particulate Filter Active Regeneration Inhibited Due to Permanent System Lockout	states/2bit	Measured
64892	3716	Diesel Particulate Filter Active Regeneration Inhibited Due to Engine Not Warmed Up	states/2bit	Status
64892	3717	Diesel Particulate Filter Active Regeneration Inhibited Due to Vehicle Speed Below Allowed Speed	states/2bit	Status
64892	3718	Diesel Particulate Filter Automatic Active Regeneration Initiation Configuration	states/2bit	Status
64892	3750	Aftertreatment 1 Diesel Particulate Filter Conditions Not Met for Active Regeneration	states/2bit	Status
64892	4175	Diesel Particulate Filter Active Regeneration Forced Status	states/3bit	Status
64892	5504	Hydrocarbon Doser Purging Enable	states/2bit	Status

64892	5629	Diesel Particulate Filter Active Regeneration Inhibited Due to Low Exhaust Pressure	states/2bit	Status
64892	8857	Diesel Particulate Filter Active Regeneration Availability Status	states/2bit	Status
64914	632	Engine Fuel Shutoff 1 Control	states/2bit	Status
64914	2807	Engine Fuel Shutoff 2 Control	states/2bit	Status
64914	3543	Engine Operating State	states/4bit	Status
64914	3589	Engine Oil Priming Pump Control	states/2bit	Status
64914	3601	Engine Fuel Shutoff Valve Leak Test Control	states/2bit	Status
64914	3602	Engine Oil Pre-heater Control	states/2bit	Status
64914	3603	Engine Electrical System Power Conservation Control	states/2bit	Status
64914	3604	Engine Pre-Heater Control	states/2bit	Status
64914	3605	Engine Coolant Pump Control	states/2bit	Status
64914	3606	Engine Controlled Shutdown Request	states/2bit	Status
64914	3607	Engine Emergency (Immediate) Shutdown Indication	states/2bit	Status
64914	3608	Engine Fuel Shutoff Vent Control	states/2bit	Status
64914	3644	Engine Derate Request	%	Status
64914	4082	Fuel Pump Primer Control	states/2bit	Status
64914	6385	Engine Starter Motor Relay Control	states/2bit	Status
64914	6807	Engine Desired Torque Request	%	Status
64914	6884	Engine Cold Ambient Elevated Idle Status	states/2bit	Status
64920	3522	Aftertreatment 1 Total Fuel Used	L	Measured
64920	5827	Aftertreatment 1 Diesel Particulate Filter Average Distance Between Active Regenerations	Km	Status
64925	3509	Sensor supply voltage 1	V	Measured
64925	3510	Sensor supply voltage 2	V	Measured
64925	3511	Sensor supply voltage 3	V	Measured
64925	3512	Sensor supply voltage 4	V	Measured
64947	3245	Aftertreatment 1 Exhaust Temperature 3	°C	Measured
64947	3246	Aftertreatment 1 Diesel Particulate Filter Outlet Temperature	°C	Measured
64948	3241	Aftertreatment 1 Exhaust Temperature 1	°C	Measured
64948	3242	Aftertreatment 1 Diesel Particulate Filter Intake Temperature	°C	Measured

64966	626	Engine Start Enable Device 1	states/2bit	Status
64966	1804	Engine Start Enable Device 2	states/2bit	Status
64966	2898	Engine Start Enable Device 2 Configuration	states/4bit	Status
64966	2899	Engine Start Enable Device 1 Configuration	states/4bit	Status
64966	5548	Engine Cold Start Fuel Igniter Command	%	Status
64966	5549	Engine Cold Start Fuel Igniter Relay	states/2bit	Status
64966	5550	Engine Cold Start Fuel Igniter Relay Feedback	states/2bit	Measured
64967	1568	Engine Torque Curve Selection	states/4bit	Status
64967	2889	Engine Droop Accelerator 1 Select State	states/4bit	Status
64967	2890	Engine Multi-Unit Sync State	states/2bit	Status
64967	2891	Engine Alternate Low Idle Select State	states/2bit	Status
64967	2893	Engine Alternate Droop Accelerator 2 Select State	states/4bit	Status
64967	2894	Engine Droop Remote Accelerator Select State	states/4bit	Status
64967	2895	Engine Droop Auxiliary Input Select State	states/4bit	Status
64967	2896	Engine Auxiliary Governor State	states/2bit	Status
64967	8664	Engine Operating Mode Selection	states/4bit	Measured
64971	1377	Engine Synchronization Switch	states/2bit	Measured
64971	2879	Engine Droop Accelerator 2 Select	states/4bit	Measured
64971	2881	Engine Droop Accelerator 1 Select	states/4bit	Measured
64971	2882	Engine Alternate Rating Select	selection	Measured
64971	2883	Engine Alternate Low Idle Switch	states/2bit	Measured
64971	2884	Engine Auxiliary Governor Switch	states/2bit	Measured
64971	2885	Engine Droop Auxiliary Input Select	states/4bit	Measured
64971	2886	Engine Droop Remote Accelerator Select	states/4bit	Measured
64971	6796	Engine Torque Curve Selection Command	states/4bit	Status
64971	8608	Engine Operating Mode Command	states/4bit	Status
64981	2789	Engine Turbocharger 1 Calculated Turbine Intake Temperature	°C	Status
64981	2790	Engine Turbocharger 1 Calculated Turbine Outlet Temperature	°C	Status
64981	2791	Engine Exhaust Gas Recirculation 1 Valve 1 Control 1	%	Status

64981	2792	Engine Variable Geometry Turbocharger (VGT) Air Control Shutoff Valve	states/2bit	Status
64981	2795	Engine Variable Geometry Turbocharger (VGT) 1 Actuator Position	%	Measured
64981	5323	Engine Fuel Control Mode	states/2bit	Status
64981	5457	Engine Variable Geometry Turbocharger 1 Control Mode	states/2bit	Status
64998	2580	Hydraulic Brake Pressure Circuit 1	КРа	Measured
64998	2581	Hydraulic Brake Pressure Circuit 2	КРа	Measured
64998	2582	Hydraulic Brake Pressure Supply State Circuit 1	states/2bit	Measured
64998	2583	Hydraulic Brake Pressure Supply State Circuit 2	states/2bit	Measured
64998	2584	Hydraulic Brake Pressure Warning State Circuit 1	states/2bit	Measured
64998	2585	Hydraulic Brake Pressure Warning State Circuit 2	states/2bit	Measured
64998	2930	Hydraulic Brake System Audible Warning Command	states/2bit	Status
64998	2931	Hydraulic Brake Fluid Level Switch	states/2bit	Measured
65089	2347	High Beam Head Light Command	states/2bit	Status
65089	2349	Low Beam Head Light Command	states/2bit	Status
65089	2351	Alternate Beam Head Light Command	states/2bit	Status
65089	2353	Tractor Front Low Mounted Work Lights Command	states/2bit	Status
65089	2355	Tractor Front High Mounted Work Lights Command	states/2bit	Status
65089	2357	Tractor Underside Mounted Work Lights Command	states/2bit	Status
65089	2359	Tractor Rear Low Mounted Work Lights Command	states/2bit	Status
65089	2361	Tractor Rear High Mounted Work Lights Command	states/2bit	Status
65089	2363	Tractor Side Low Mounted Work Lights Command	states/2bit	Status
65089	2365	Tractor Side High Mounted Work Lights Command	states/2bit	Status
65089	2367	Left Turn Signal Lights Command	states/2bit	Status
65089	2369	Right Turn Signal Lights Command	states/2bit	Status
65089	2371	Left Stop Light Command	states/2bit	Status
65089	2373	Right Stop Light Command	states/2bit	Status
65089	2375	Center Stop Light Command	states/2bit	Status
65089	2377	Tractor Marker Light Command	states/2bit	Status
65089	2379	Implement Marker Light Command	states/2bit	Status
65089	2381	Tractor Clearance Light Command	states/2bit	Status
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65089	2383	Implement Clearance Light Command	states/2bit	Status
65089	2385	Rotating Beacon Light Command	states/2bit	Status
65089	2387	Tractor Front Fog Lights Command	states/2bit	Status
65089	2389	Rear Fog Light Command	states/2bit	Status
65089	2391	Back Up Light and Alarm Horn Command	states/2bit	Status
65089	2393	Lighting Data Request Command	states/2bit	Status
65089	2395	Implement OEM Option 1 Light Command	states/2bit	Status
65089	2397	Implement OEM Option 2 Light Command	states/2bit	Status
65089	2399	Implement Left Facing Work Light Command	states/2bit	Status
65089	2401	Implement Right Forward Work Light Command	states/2bit	Status
65089	2403	Running Light Command	states/2bit	Status
65089	2405	Implement Rear Work Light Command	states/2bit	Status
65089	2406	Implement Right Facing Work Light Command	states/2bit	Status
65089	2597	Implement Left Forward Work Light Command	states/2bit	Status
65110	1761	Aftertreatment 1 Diesel Exhaust Fluid Tank Volume	%	Measured
65110	3031	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature 1	°C	Measured
65110	3363	Aftertreatment 1 Diesel Exhaust Fluid Tank Heater	%	Measured
65110	3517	Aftertreatment 1 Diesel Exhaust Fluid Tank Level	mm	Measured
65110	5245	Aftertreatment Diesel Exhaust Fluid Tank Low Level Indicator	states/3bit	Status
65110	5246	Aftertreatment SCR Operator Inducement Severity	states/3bit	Status
65128	1638	Hydraulic Temperature	°C	Measured
65128	1713	Hydraulic Oil Filter Restriction Switch	states/2bit	Measured
65128	1857	Winch Oil Pressure Switch	states/2bit	Measured
65128	2602	Hydraulic Oil Level	%	Measured
65129	1636	Engine Intake Manifold 1 Temperature (High Resolution)	°C	Measured
65129	1637	Engine Coolant Temperature (High Resolution)	°C	Measured
65129	2630	Engine Charge Air Cooler 1 Outlet Temperature	°C	Measured
65129	2986	Engine Intake Valve Actuation System Oil Temperature	°C	Measured

65130	1380	Engine Oil Level Remote Reservoir	%	Measured
65130	1381	Engine Fuel Supply Pump Intake Absolute Pressure	КРа	Measured
65130	1382	Engine Fuel Filter (suction side) Differential Pressure	КРа	Measured
65130	3548	Engine Waste Oil Reservoir Level	%	Measured
65130	3549	Engine Oil Filter Outlet Pressure	КРа	Measured
65130	3550	Engine Oil Priming Pump Switch	states/2bit	Measured
65130	3551	Engine Oil Priming State	states/2bit	Status
65130	3552	Engine Oil Pre-Heated State	states/2bit	Status
65130	3553	Engine Coolant Pre-heated State	states/2bit	Status
65130	3554	Engine Ventilation Status	states/3bit	Status
65130	4083	Fuel Pump Primer Status	states/2bit	Status
65130	7104	Engine Fuel Supply Pump Intake Pressure	КРа	Measured
65132	1611	Vehicle motion	states/2bit	Measured
65132	1612	Driver 1 working state	states/3bit	Status
65132	1613	Driver 2 working state	states/3bit	Status
65132	1614	Vehicle Overspeed	states/2bit	Measured
65132	1615	Driver card- driver 1	states/2bit	Measured
65132	1616	Driver card- driver 2	states/2bit	Measured
65132	1617	Driver 1 Time Related States	states/4bit	Measured
65132	1618	Driver 2 Time Related States	states/4bit	Measured
65132	1619	Direction indicator	states/2bit	Measured
65132	1620	Tachograph performance	states/2bit	Status
65132	1621	Handling information	states/2bit	Status
65132	1622	System event	states/2bit	Status
65132	1623	Tachograph output shaft speed	RPM	Measured
65132	1624	Tachograph vehicle speed	Km/h	Measured
65159	1433	Engine Desired Ignition Timing 1	deg	Status
65159	1434	Engine Desired Ignition Timing 2	deg	Status
65159	1435	Engine Desired Ignition Timing 3	deg	Status

65159	1436	Engine Actual Ignition Timing	deg	Status
65164	354	Relative Humidity	%	Measured
65164	441	Auxiliary Temperature 1	°C	Measured
65164	442	Auxiliary Temperature 2	°C	Measured
65164	1387	Auxiliary Pressure #1	КРа	Measured
65164	1388	Auxiliary Pressure #2	КРа	Measured
65164	3087	Auxiliary Level	mm	Measured
65174	1188	Engine Turbocharger Wastegate Actuator 1 Position	%	Measured
65174	1189	Engine Turbocharger Wastegate Actuator 2 Position	%	Measured
65174	1190	Engine Turbocharger Wastegate Actuator 3 Position	%	Measured
65174	1191	Engine Turbocharger Wastegate Actuator 4 Position	%	Measured
65174	1192	Engine Turbocharger Wastegate Actuator Control Air Pressure	КРа	Measured
65174	5370	Engine Turbocharger Wastegate Actuator 1 Desired Position	%	Status
65174	5372	Engine Turbocharger Wastegate Actuator 1 Temperature Status	states/3bit	Status
65174	5373	Engine Turbocharger Wastegate Actuator 2 Desired Position	%	Status
65213	975	Engine Fan 1 Estimated Percent Speed	%	Status
65213	977	Fan Drive State	states/4bit	Status
65213	1639	Fan Speed	RPM	Measured
65213	4211	Hydraulic Fan Motor Pressure	КРа	Measured
65213	4212	Fan Drive Bypass Command Status	%	Status
65216	914	Service Distance	km	Measured
65216	915	Service Delay/Calendar Time Based	weeks	Measured
65226	623	Diagnostic Reporting – DM1	states/2bit	Status
65226	624	Diagnostic Reporting – DM1	states/2bit	Status
65226	987	Diagnostic Reporting – DM1	states/2bit	Status
65226	1213	Diagnostic Reporting – DM1	states/2bit	Status
65226	1706	Diagnostic Reporting – DM1	states/1bit	Status
65226	3038	Diagnostic Reporting – DM1	states/2bit	Status
65226	3039	Diagnostic Reporting – DM1	states/2bit	Status

65226	3040	Diagnostic Reporting – DM1	states/2bit	Status
65226	3041	Diagnostic Reporting – DM1	states/2bit	Status
65237	589	Alternator Speed	RPM	Measured
65237	3353	Alternator 1 Status	states/2bit	Measured
65237	3354	Alternator 2 Status	states/2bit	Measured
65237	3355	Alternator 3 Status	states/2bit	Measured
65237	3356	Alternator 4 Status	states/2bit	Measured
65242	965	Number of Software Identification Fields	step	Measured
65243	156	Engine Fuel 1 Injector Timing Rail 1 Pressure	MPa	Measured
65243	157	Engine Fuel 1 Injector Metering Rail 1 Pressure	MPa	Measured
65243	164	Engine Fuel Injection Control Pressure	MPa	Measured
65243	1349	Engine Fuel 1 Injector Metering Rail 2 Pressure	MPa	Measured
65244	236	Engine Total Idle Fuel Used	L	Measured
65247	514	Nominal Friction - Percent Torque	%	Status
65247	515	Engine's Desired Operating Speed	RPM	Status
65247	519	Engine's Desired Operating Speed Asymmetry Adjustment	Ratio	Status
65247	2978	Estimated Engine Parasitic Losses - Percent Torque	%	Status
65247	3236	Aftertreatment 1 Exhaust Gas Mass Flow Rate	Kg/h	Measured
65247	3237	Aftertreatment 1 Intake Dew Point	states/2bit	Status
65247	3238	Aftertreatment 1 Exhaust Dew Point	states/2bit	Status
65247	3239	Aftertreatment 2 Intake Dew Point	states/2bit	Status
65247	3240	Aftertreatment 2 Exhaust Dew Point	states/2bit	Status
65248	244	Trip Distance	Km	Measured
65248	245	Total Vehicle Distance	Km	Measured
65251	188	Engine Speed At Idle, Point 1	rpm	Measured
65251	528	Engine Speed At Point 2	rpm	Measured
65251	529	Engine Speed At Point 3	rpm	Measured
65251	530	Engine Speed At Point 4	rpm	Measured
65251	531	Engine Speed At Point 5	rpm	Measured

65251	532	Engine Speed At High Idle, Point 6	rpm	Measured
65251	533	Engine Maximum Momentary Override Speed, Point 7	rpm	Measured
65251	535	Engine Requested Speed Control Range Lower Limit	rpm	Measured
65251	536	Engine Requested Speed Control Range Upper Limit	rpm	Measured
65251	537	Engine Requested Torque Control Range Lower Limit	%	Measured
65251	538	Engine Requested Torque Control Range Upper Limit	%	Measured
65251	539	Engine Percent Torque At Idle, Point 1	%	Measured
65251	540	Engine Percent Torque At Point 2	%	Measured
65251	541	Engine Percent Torque At Point 3	%	Measured
65251	542	Engine Percent Torque At Point 4	%	Measured
65251	543	Engine Percent Torque At Point 5	%	Measured
65251	544	Engine Reference Torque	Nm	Measured
65251	545	Engine Gain (Kp) Of The Endspeed Governor	%/rpm	Measured
65251	1712	Engine Requested Speed Control Range Upper Limit (Extended Range)	rpm	Measured
65251	1794	Engine Moment of Inertia	kgm²	Status
65251	1846	Engine Default Torque Limit	Nm	Measured
65251	3344	Support Variable Rate TSC1 Message	bit	Status
65251	3345	Support TSC1 Control Purpose Group 1	bit	Status
65251	3346	Support TSC1 Control Purpose Group 2	bit	Status
65251	3347	Support TSC1 Control Purpose Group 3	bit	Status
65251	3348	Support TSC1 Control Purpose Group 4	bit	Status
65251	7828	Engine Default Idle Torque Limit	%	Measured
65252	590	Engine Idle Shutdown Timer State	states/2bit	Status
65252	591	Engine Idle Shutdown Timer Function	states/2bit	Measured
65252	592	Engine Idle Shutdown Timer Override	states/2bit	Status
65252	593	Engine Idle Shutdown has Shutdown Engine	states/2bit	Status
65252	594	Engine Idle Shutdown Driver Alert Mode	states/2bit	Status
65252	605	Refrigerant High Pressure Switch	states/2bit	Measured
65252	875	Refrigerant Low Pressure Switch	states/2bit	Measured

65252	985	A/C High Pressure Fan Switch	states/2bit	Measured
65252	1081	Engine Wait to Start Lamp	states/2bit	Status
65252	1107	Engine Protection System Timer State	states/2bit	Status
65252	1108	Engine Protection System Timer Override	states/2bit	Status
65252	1109	Engine Protection System Approaching Shutdown	states/2bit	Status
65252	1110	Engine Protection System has Shutdown Engine	states/2bit	Status
65252	1111	Engine Protection System Configuration	states/2bit	Status
65252	2812	Engine Overspeed Test	states/2bit	Measured
65252	2813	Engine Air Shutoff Command Status	states/2bit	Status
65252	2814	Engine Alarm Output Command Status	states/2bit	Status
65252	2815	Engine Alarm Acknowledge	states/2bit	Measured
65252	3667	Engine Air Shutoff Status	states/2bit	Status
65252	5404	PTO Shutdown has Shutdown Engine	states/2bit	Status
65252	5566	Coolant Level Engine Protection Shutdown Status	states/2bit	Status
65252	8159	Engine Oil Pressure Switch	states/2bit	Measured
65253	249	Engine Total Revolutions	r	Measured
65257	182	Engine Trip Fuel	L	Measured
65257	250	Engine Total Fuel Used	L	Measured
65262	52	Engine Intercooler Temperature	°C	Measured
65262	110	Engine Coolant Temperature	°C	Measured
65262	174	Engine Fuel 1 Temperature 1	°C	Measured
65262	175	Engine Oil Temperature 1	°C	Measured
65262	176	Engine Turbocharger 1 Oil Temperature	°C	Measured
65262	1134	Engine Charge Air Cooler Thermostat Opening	%	Measured
65263	22	Engine Extended Crankcase Blow-by Pressure	КРа	Measured
65263	94	Engine Fuel Delivery Pressure	КРа	Measured
65263	98	Engine Oil Level	%	Measured
65263	100	Engine Oil Pressure	КРа	Measured
65263	101	Engine Crankcase Pressure 1	КРа	Measured

65263	109	Engine Coolant Pressure 1	КРа	Measured
65263	111	Engine Coolant Level 1	%	Measured
65264	90	Power Takeoff Oil Temperature	°C	Measured
65264	186	Power Takeoff Speed	RPM	Measured
65264	187	Power Takeoff Set Speed	RPM	Measured
65264	978	Engine Remote PTO Governor Variable Speed Control Switch	states/2bit	Measured
65264	979	Engine Remote PTO Governor Preprogrammed Speed Control Switch	states/2bit	Measured
65264	980	Engine PTO Governor Enable Switch	states/2bit	Measured
65264	981	Engine PTO Governor Accelerate Switch	states/2bit	Measured
65264	982	Engine PTO Governor Resume Switch	states/2bit	Measured
65264	983	Engine PTO Governor Coast/Decelerate Switch	states/2bit	Measured
65264	984	Engine PTO Governor Set Switch	states/2bit	Measured
65264	2897	Operator Engine PTO Governor Memory Select Switch	states/2bit	Measured
65264	3447	Remote PTO Governor Preprogrammed Speed Control Switch #2	states/2bit	Measured
65264	3448	Auxiliary Input Ignore Switch	states/2bit	Measured
65264	8639	Engine PTO Governor Disable Switch	states/2bit	Measured
65265	69	Two Speed Axle Switch	states/2bit	Measured
65265	70	Parking Brake Switch	states/2bit	Measured
65265	84	Wheel-Based Vehicle Speed	Km/h	Measured
65265	86	Cruise Control Set Speed	Km/h	Measured
65265	527	Cruise Control States	states/3bit	Status
65265	595	Cruise Control Active	states/2bit	Measured
65265	596	Cruise Control Enable Switch	states/2bit	Measured
65265	597	Brake Switch	states/2bit	Measured
65265	598	Clutch Switch	states/2bit	Measured
65265	599	Cruise Control Set Switch	states/2bit	Measured
65265	600	Cruise Control Coast (Decelerate) Switch	states/2bit	Measured
65265	601	Cruise Control Resume Switch	states/2bit	Measured
65265	602	Cruise Control Accelerate Switch	states/2bit	Measured

65265	966	Engine Diagnostic Test Mode Switch	states/2bit	Measured
65265	967	Engine Idle Decrement Switch	states/2bit	Measured
65265	968	Engine Idle Increment Switch	states/2bit	Measured
65265	1237	Engine Shutdown Override Switch	states/2bit	Measured
65265	1633	Cruise Control Pause Switch	states/2bit	Measured
65265	3807	Park Brake Release Inhibit Request	states/2bit	Status
65266	51	Engine Throttle Valve 1 Position 1	%	Measured
65266	183	Engine Fuel Rate	L/h	Measured
65266	184	Engine Instantaneous Fuel Economy	km/L	Measured
65266	185	Engine Average Fuel Economy	Km/L	Measured
65266	3673	Engine Throttle Valve 2 Position	%	Measured
65269	79	Road Surface Temperature	°C	Measured
65269	108	Barometric Pressure	КРа	Measured
65269	170	Cab Interior Temperature	°C	Measured
65269	171	Ambient Air Temperature	°C	Measured
65269	172	Engine Intake 1 Air Temperature	°C	Measured
65270	102	Engine Intake Manifold #1 Pressure	КРа	Measured
65270	105	Engine Intake Manifold 1 Temperature	°C	Measured
65270	106	Engine Intake Air Pressure	КРа	Measured
65270	107	Engine Air Filter 1 Differential Pressure	КРа	Measured
65270	112	Engine Coolant Filter Differential Pressure	КРа	Measured
65270	173	Engine Exhaust Temperature	°C	Measured
65271	114	SLI Battery 1 Net Current	А	Measured
65271	115	Alternator Current	A	Measured
65271	158	Key Switch Battery Potential	V	Measured
65271	167	Charging System Potential (Voltage)	V	Measured
65271	168	Battery Potential / Power Input 1	V	Measured
65272	123	Clutch Pressure	КРа	Measured
65272	124	Transmission Oil Level 1	%	Measured

65272	126	Transmission Filter Differential Pressure	КРа	Measured
65272	127	Transmission Oil Pressure	КРа	Measured
65272	177	Transmission Oil Temperature 1	°C	Measured
65272	3026	Transmission Oil Level 1 Measurement Status	states/4bit	Status
65272	3027	Transmission Oil Level 1 High / Low	L	Measured
65272	3028	Transmission Oil Level 1 Countdown Timer	states/4bit	Measured
65274	116	Brake Application Pressure	КРа	Measured
65274	117	Brake Primary Pressure	КРа	Measured
65274	118	Brake Secondary Pressure	КРа	Measured
65274	619	Parking Brake Actuator	states/2bit	Measured
65274	3557	Parking Brake Red Warning Signal	states/2bit	Status
65274	3808	Park Brake Release Inhibit Status	states/2bit	Measured
65276	38	Fuel Level 2	%	Measured
65276	80	Washer Fluid Level	%	Measured
65276	95	Engine Fuel Filter Differential Pressure	КРа	Measured
65276	96	Fuel Level 1	%	Measured
65276	99	Engine Oil Filter Differential Pressure	КРа	Measured
65276	169	Cargo Ambient Temperature	°C	Measured
65279	97	Water In Fuel Indicator 1	states/2bit	Measured
65279	5675	Operator Shift Prompt	states/2bit	Status
65279	5825	Driver Warning System Indicator Status	states/3bit	Status
65279	5826	Emission Control System Operator Inducement Severity	states/3bit	Status
65279	6301	Water in Fuel Indicator 2	states/2bit	Measured
65279	8428	Fuel Supply Estimated Remaining Distance	Km	Status
65279	8611	Water In Charge Air Duct After Charge Air Cooler Indicator	states/2bit	Measured
65279	8612	Engine Overloaded Indicator	states/2bit	Status

10 Gauge Abbreviations

Abbreviation	Gauge Type
Fuel1	Fuel Level
DEF Level	DEF Level
IntakeMan	Engine Intake Manifold Temperature
EngOil	Engine Oil Pressure
BrakeSec	Secondary Brake Pressure
BrakePri	Primary Brake Pressure
TransOil	Transmission Oil Pressure
EngCoolant	Engine Coolant Temperature
EngOil1	Engine Oil Temperature
AuxTemp1	
TransOil1	Transmission Oil Temperature
BatteryP1	Battery Voltage
VehSpeed	Vehicle Speed
EngSpeed	Engine Speed (RPM)
Ammeter	Ammeter
EnTripFuel	Trip Fuel Consumption
EngFRate	Current Fuel Economy

11 Troubleshooting Guide

• How to reset Cluster to Factory Defaults?:

Tool starts on factory defaults, to reset cluster to factory defaults connect to cluster then write configuration to cluster.

• During transfer configuration Tool is showing a popup message "USB Communication Failure During Configuration Transfer":



- 1. Check correct cable connection during transferring.
- 2. Cycle power to maxAI Cluster
- During Flashing process Tool is displaying a popup message "Cluster does not respond command to enter bootloader":



- 1. Cluster is ready and waiting to receive firmware update, from previous suspended update task.
- 2. Cluster is not processing "Enter Bootloader Command" reset Cluster to then retry.

North and Latin America

maximatecc

N19 W24200 Riverwood Drive, Suite 300 Waukesha Wisconsin 53188, USA +1 800-676 1837

Europe/Middle East/Africa (EMEA)

AST

Progrés 32, 08191 Rubi, Barcelona, SPAIN. +34 93 586 20 73

Brasil

Turotest Medidores Ltda Avenida Luiz Merenda, 489 - Campanário Diadema-SP - CEP: 09931-390, Brasil +551140927200

12 Revision Log

Date	Revision	Description	Approved
		Based on maxAI Configuration Tool rev N	
		- Updated general format	
8/18/2021	0	- Updated all images	MG
		- Updated section 3.5.1.5 Communications	
		CAN0 & CAN1 baud rate can be configured independently	
		Pin protected implementation	
		- Added new features	
		LCD Warning Lights	
		Miscellaneous (CAN camera activation)	
		Slash screen time config	
		Popup Banner	
		- Updated Supported PGNs	
8/18/2021	Р	- Updated contact information	MG
8/29/2021	Q	- Updated Video section	MG