



**POWER SOLUTIONS  
INTERNATIONAL**

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## *PRODUCT NOTICE*

**Bulletin Number – PSI1030**

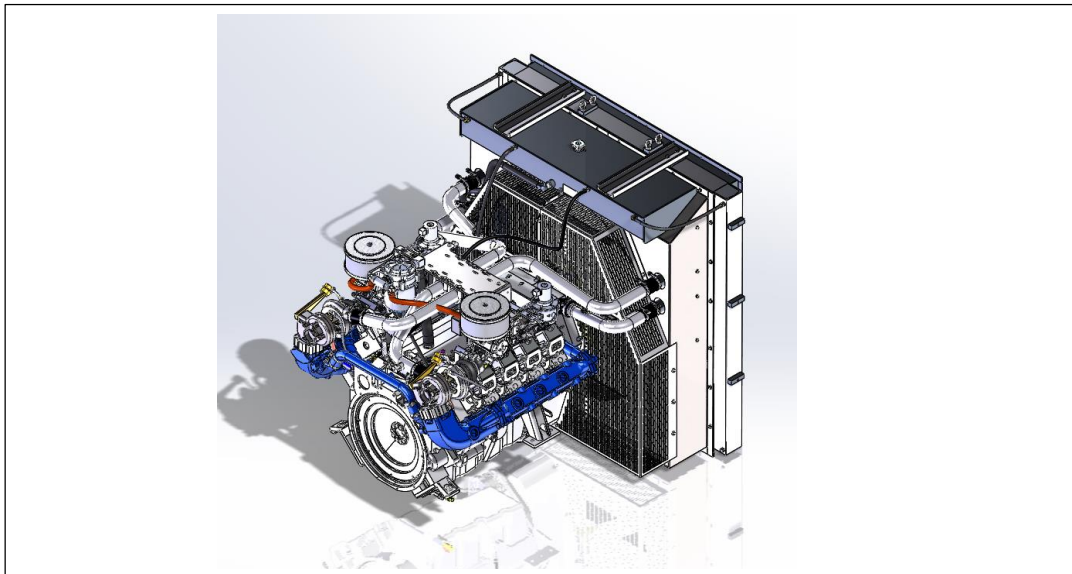
**Notice Title – HD 4G Display Software**

**Date of Notice – 7/6/2015**

**Engine Displacement – PSI HD 4G V-Series Engines (14.6L, 18.3L, 21.9L)**

**Estimated Effective Date – 7/7/2015**

When monitoring a 4G V-Series engine, there must be two 4G Displays opened. Opening two displays will allow you to monitor both the Master and Slave banks of the engine at the same time and record simultaneous plot files if needed. This **MUST** be done anytime communications are established with the engine to ensure the ECM's do not boot out of sequence due to the presence of PC communications. Failure to establish communication with both the Master & Slave ECMs and connection only to the Master may have impact on the electrical system. Instructions to connect to both banks of the engine are below. Please contact your Customer Support Engineer for any questions.

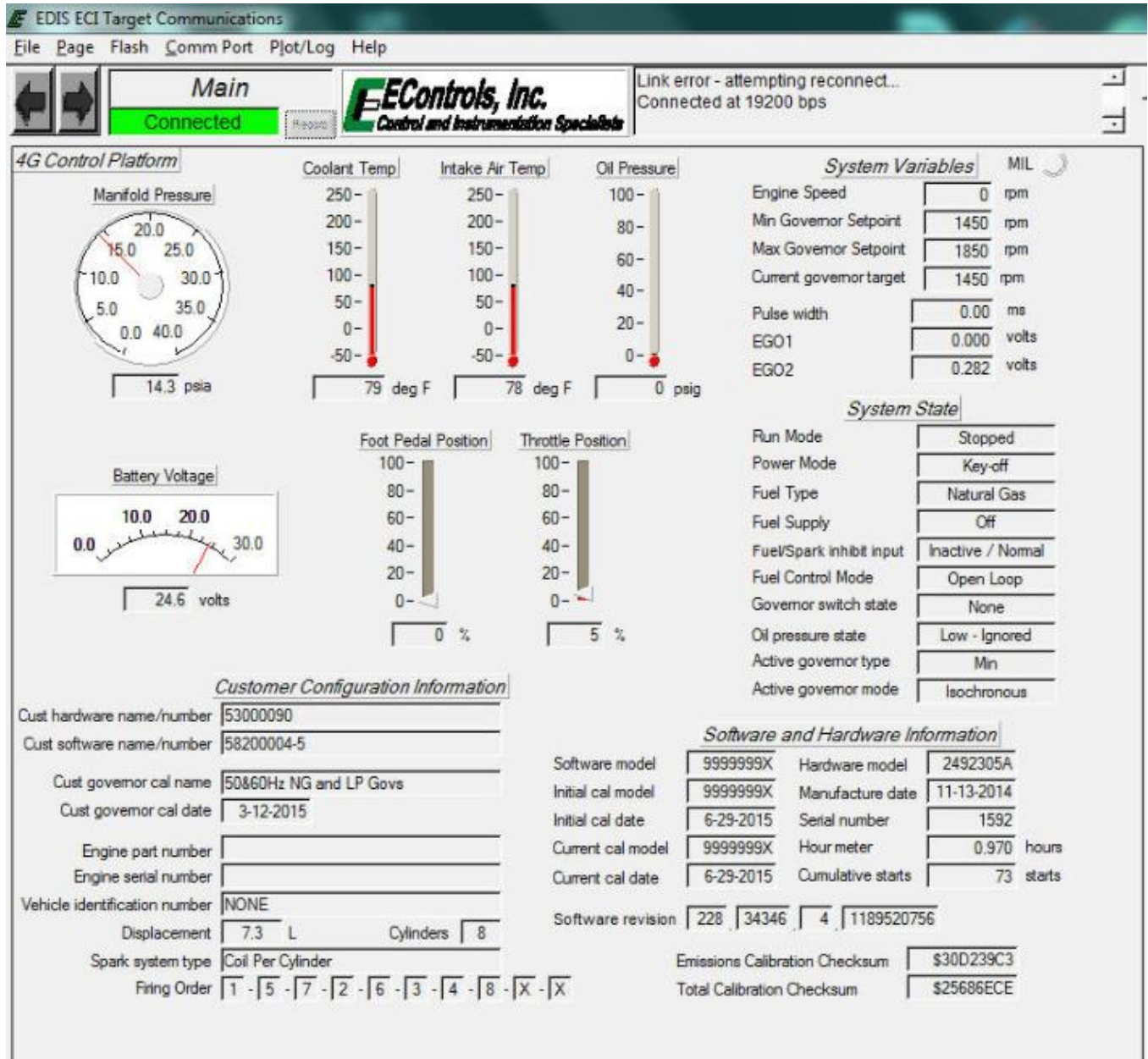


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Step 1) Connect **ONE** ECOM cable to the diagnostic port on the engine harness. *NOTE: These engines only require the use of one ECOM unlike the previous GCP versions that required one per bank.*

Step 2) Start the engine.

Step 3) Open a 4G Display and verify the connected (top left corner).



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Step 4) Select **Comm Port** then **Configure ECOM**.

**EDIS ECI Target Communications**

File Page Flash **Comm Port** Plot/Log Help

**EControls, Inc.**  
Control and Instrumentation Specialists

Link error - attempting reconnect...  
Connected at 19200 bps

**4G Control Platform**

Manifold Pressure: 15.0

Battery: 24.6 volts

Intake Air Temp: 78 deg F

Oil Pressure: 0 psig

Engine Speed: 0 rpm

Min Governor Setpoint: 1450 rpm

Max Governor Setpoint: 1850 rpm

Current governor target: 1450 rpm

Pulse width: 0.00 ms

EGO1: 0.000 volts

EGO2: 0.292 volts

**System Variables**

**System State**

Run Mode: Stopped

Power Mode: Key-off

Fuel Type: Natural Gas

Fuel Supply: Off

Fuel/Spark inhibit input: Inactive / Normal

Fuel Control Mode: Open Loop

Governor switch state: None

Oil pressure state: Low - Ignored

Active governor type: Min

Active governor mode: Isochronous

**Customer Configuration Information**

Cust hardware name/number: 53000090

Cust software name/number: 58200004-5

Cust governor cal name: 50&60Hz NG and LP Govs

Cust governor cal date: 3-12-2015

Engine part number:

Engine serial number:

Vehicle identification number: NONE

Displacement: 7.3 L Cylinders: 8

Spark system type: Coil Per Cylinder

Firing Order: 1 - 5 - 7 - 2 - 6 - 3 - 4 - 8 - X - X

**Software and Hardware Information**

Software model: 9999999X

Initial cal model: 9999999X

Initial cal date: 6-29-2015

Current cal model: 9999999X

Current cal date: 6-29-2015

Software revision: 228 34346 4 1189520756

Hardware model: 2492305A

Manufacture date: 11-13-2014

Serial number: 1592

Hour meter: 0.970 hours

Cumulative starts: 73 starts

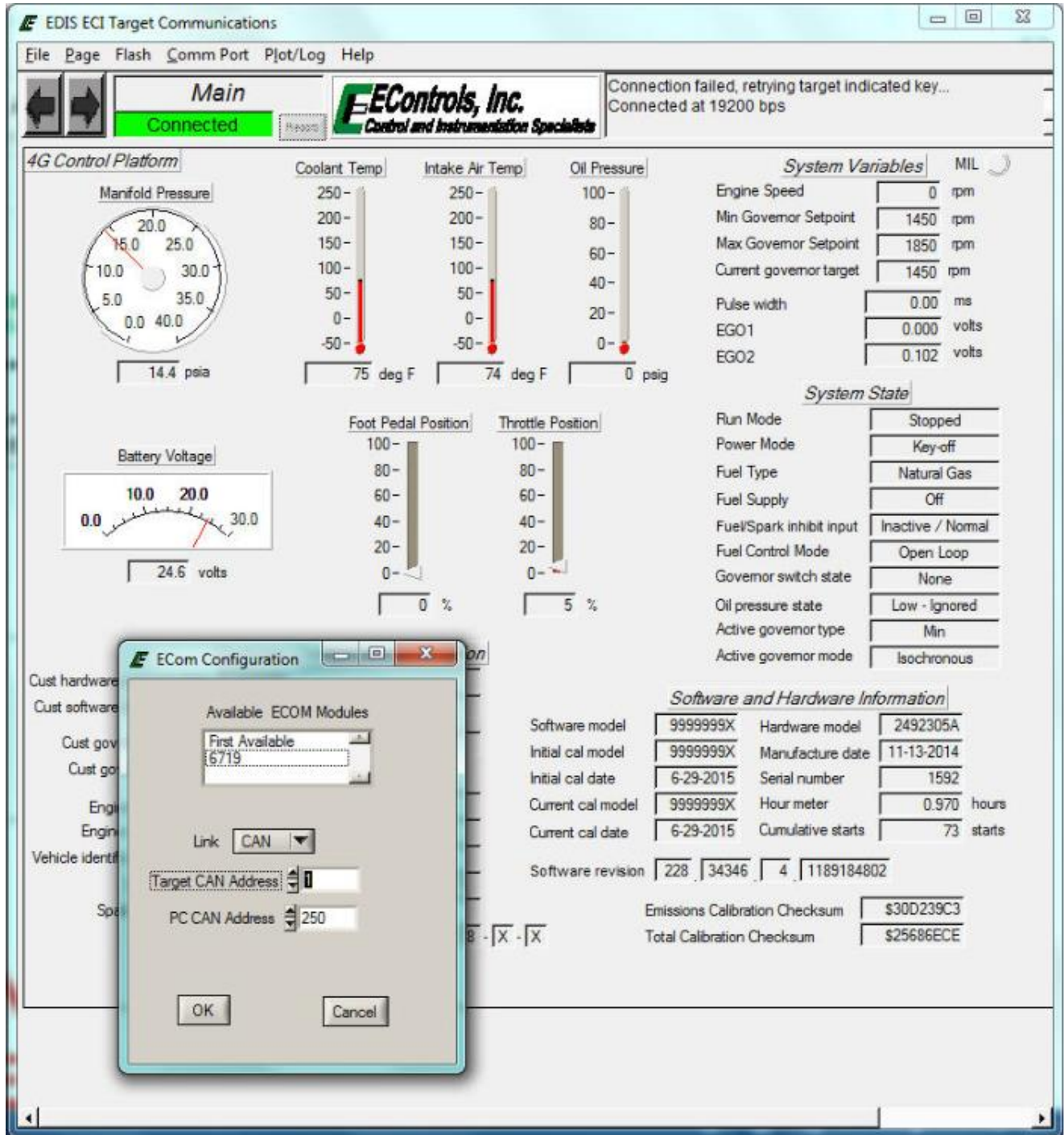
Emissions Calibration Checksum: \$30D239C3

Total Calibration Checksum: \$25686ECE

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Step 5) An ECom Configuration window will appear. For **Target CAN Address**, change the “0” to a “1”, then select OK.



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Step 6) Disconnect the ECOM USB connection from your computer and reconnect. Verify slave bank connectivity by going to the Marine page and verify slave communications (see arrows below).

The screenshot displays the EDIS ECI Target Communications software interface, specifically the Marine page. The interface is divided into several sections:

- Marine Engine Operation:** Displays various engine parameters such as Engine Speed (0 rpm), Manifold Pressure (14.31 psia), Barometric Pressure (13.95 psia), Coolant Temperature (144.6 °F), Intake Air Temperature (111.1 °F), Spark Advance (0.0 °BTDC), Pulse width (0.0 ms), Vbat (25.0 volts), Vsw (0.0 volts), FPP command (0.0 %), and TPS command (30.1 %).
- Multi-Engine CAN Communication Status:** A table showing the status of the Master and Slave 1, 2, and 3. A red arrow points to the Slave 1 status, which is highlighted in green. The table includes columns for Connection, Sync mode, Engine status, Speed target/actual, FPP target/actual, MAP target/actual, ECT, and Oil pressure.
- Multi-Engine Configuration:** A section with a dropdown menu for Multi-engine selection (set to Aux PU2 Select) and a status indicator for Multi-engine status (set to Slave 1). A red arrow points to this section.
- Multi-Engine Derate Coordination:** A section with a dropdown menu for Multi-engine derate coordination (set to Enabled) and a status indicator for Multi-engine derate logic state (set to Offline).
- Multi-Engine Speed Synchronization:** A section with a dropdown menu for Multi-engine speed sync (set to Disabled) and a status indicator for Sync switch source (set to Normal).
- Multi-Engine Gauge Driver Synchronization:** A section with a dropdown menu for ECT multi-engine gauge sync (set to Disabled) and a status indicator for OilP multi-engine gauge sync (set to Disabled).

At the bottom of the interface, there are two gauge displays: ECT gauge sync'd display value (145 deg F) and OilP gauge sync'd display value (0 psig).

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Step 7) Launch a second version of 4G Display to connect to the Master. Verify both screens are connected.



Step 8) Monitor the **Cust Software Name/Number**. The **SLAVE bank will be one digit higher than the Master**. See the chart below for specific engine Master and Slave numbers.

Customer Configuration Information		Software and Hardware Information		Customer Configuration Information	
Cust hardware name/number	53000090	Software model	9999999X	Cust hardware name/number	53000090
Cust software name/number	58200004	Hardware model	2492305A	Cust software name/number	58200005
Cust governor cal name	50&60Hz NG and LP Govs	Initial cal model	9999999X	Cust governor cal name	50&60Hz NG and LP Govs
Cust governor cal date	3-12-2015	Initial cal date	6-29-2015	Cust governor cal date	3-12-2015
Engine part number		Current cal model	9999999X	Engine part number	
Engine serial number		Current cal date	6-29-2015	Engine serial number	
Vehicle identification number	NONE	Cumulative starts	73 starts	Vehicle identification number	NONE
Displacement	7.3 L Cylinders 8	Software revision	228 34346 4 1189184802	Displacement	7.3 L Cylinders 8
Spark system type	Coil Per Cylinder	Emissions Calibration Checksum	\$30D239C3	Spark system type	Coil Per Cylinder
Firing Order	1 - 5 - 7 - 2 - 6 - 3 - 4 - 8 - X - X	Total Calibration Checksum	\$25688ECE	Firing Order	1 - 5 - 7 - 2 - 6 - 3 - 4 - 8 - X - X

**\*\* Steps 1-8 should be repeated if the SLAVE 4G Display is closed while the engine is off. At no time should 4G Display be left communicating with the Master ECM on its own. You can leave the displays open while disconnecting the ECOM from the engine and reconnecting.**

You are now connected to both the Master and Slave banks on the V-Series engines.

Displacement	Master	Slave
14.6L	58200004	58200005
18.3L	58200006	58200007
21.9L	58200008	58200009

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