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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

POWER SOLUTIONS

ITERNATION

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.



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).

Main Connected		ontrols, li and instrument	TC. Link Conr	error - attempting reconnect nected at 19200 bps	
G Control Platform	Coolant Temp	Intake Air Te	emp Oil Pressure	System Va	riables MIL 🔵
Manifold Pressure	250 - 11	250- 1	100 - 🎁	Engine Speed	0 rpm
200	200 -	200 -	80-	Min Governor Setpoint	1450 mm
15.0 25.0	150-	150-	60-	Max Governor Setpoint	1850 rpm
-10.0 30.0 -	100 -	100-	00-	Current governor target	1450 rpm
5.0 35.0	50-	50-	40-	Pulse width	0.00 ms
0.0 40.0	0-	0-	20-	EG01	0.000 volts
	-50 - 👗	-50 - 👃	0 - 🍯	EGO2	0.282 volts
14,3 psia	79 deg	F 78	deg F 0	psig	a
				System	State
	Foot Ped	al Position	Throttle Position	Hun Mode	Stopped
Battery Voltage	100-		100-	Power Mode	Key-off
10.0 20.0	80-		80-	Fuel Type	Natural Gas
00 100 200	- 00 40-		40-	Fuel Supply	Off
0.0 5	40-		40-	Fuel/Spark inhibit input	Inactive / Normal
24.6 volte	- 20		0-	Fuel Control Mode	Open Loop
1 24.0 1000		-		Governor switch state	None
	1	0 %	5 %	Oil pressure state	Low - Ignored
Custon	ar Configuration I	Information		Active governor type	Min
et hardware name /n mber 530000	ion	monnauon		Active governor mode	Isochronous
ut activare name/number 530000	04.5			Software and Hardware In	formation
usi soliware name/number [pozoou	04-0		Software model	9999999X Hardware model	2492305A
Cust governor cal name 50&60H	Iz NG and LP Govs		Initial cal model	9999999X Manufacture date	11-13-2014
Cust governor cal date 3-12-	2015		Initial cal date	6-29-2015 Serial number	1592
Engine part number			Current cal model	9999999X Hour meter	0.970 hours
Engine serial number			Current cal date	6-29-2015 Cumulative starts	73 starts
shicle identification number NONE					
Displacement 7.3	L Cylin	ders 8	Software revision	1 228 34346 4 11895207	56
Spark system type Coil Per	Cylinder			Emissions Calibration Checksum	\$30D239C3
Firing Order 1 - 5	- 7 - 2 - 6 - 3	-4-8-	X-X	Total Calibration Checksum	\$25686ECE

EDIS ECI Target Communications Page Flash Comm Port Plot/Log Help File -Automatic COM Link error - attempting reconnect. EControls, Inc. Connected at 19200 bps COM1 Control and Instrumentation Specia • COM2 4G Control Platfo. System Variables MIL Intake Air Temp **Oil Pressure** np COM3 Manifold I 250-100-Engine Speed 0 rpm COM4 Min Governor Setpoint 200-1450 rpm 80-20. COM5 15.0 150-Max Governor Setpoint (D) 1850 COM6 60-100-Current governor target 10.0 1450 mm COM7 40-50-5.0 Pulse width 0.00 ms COM8 20-0-0.0 0.000 volts EG01 CAN -50-0-2 0.292 volts EGO2 Configure CAN ... 14 deg F 0 psig T. 78 deg F System State ✓ ECOM Run Mode Stopped ot Pedal Position Throttle Position 100-100-Power Mode Key-off Battery Show Stats Ctrl+S 80-80-Fuel Type Natural Gas 10.0 20.0 60-60-Fuel Supply Off 30.0 0.0 40-40-Fuel/Spark inhibit input Inactive / Normal 20 -20-Fuel Control Mode Open Loop 24.6 volts 0-0-Governor switch state None 5 % 0 % Oil pressure state Low - Ignored Active governor type Min Customer Configuration Information Active governor mode isochmous Cust hardware name/number 53000090 Software and Hardware Information Cust software name/number 58200004-5 9999999X 2492305A Software model Hardware model Cust governor cal name 50&60Hz NG and LP Govs Initial cal model 99999999X Manufacture date 11-13-2014 Cust governor cal date 3-12-2015 Initial cal date 6-29-2015 Serial number 1592 9999999X Hour meter 0.970 hours Current cal model Engine part number 6-29-2015 Cumulative starts 73 starts Engine serial number Current cal date Vehicle identification number NONE Software revision 228 34346 4 1189520756 7.3 Cylinders 8 Displacement L \$30D239C3 Spark system type Coil Per Cylinder Emissions Calibration Checksum Firing Order 1 - 5 - 7 - 2 - 6 - 3 - 4 - 8 - X - X **Total Calibration Checksum** \$25686ECE

Step 4) Select Comm Port then Configure ECOM.

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

ile <u>P</u> age Flash <u>C</u> omm Port F	lot/Log Help				
Main Connected		rols, Inc. Intranentation Specialist	Connection fai Connected at	led, retrying target indi 19200 bps	cated key
IG Control Platform Manifold Pressure	Coolant Temp In 250 - 200 -	take Air Temp Oil 250 - 11 200 - 1	Pressure 30 -	<i>System Va.</i> Engine Speed Min Governor Setpoint	niables MIL) 0 rpm 1450 rpm
15.0 25.0 10.0 30.0 5.0 35.0	150 - 100 - 50 -	150- 100- 50-	50- 40-	Max Governor Setpoint Current governor target	1850 rpm 1450 rpm
0.0 40.0	0- -50-	0-	20-	EG01 EG02	0.000 ms 0.000 volts 0.102 volts
14.4 paid	/5 deg F	/4 deg F	U paig	System	State
	Foot Pedal Po	sition Throttle Position	<u>n</u>	Run Mode	Stopped
Battery Voltage	100-	100-		Power Mode	Key-off
	-08	80-		Fuel Type	Natural Gas
10.0 20.0	60-	60-		Fuel Supply	Off
0.0	40-	40-		Fuel/Spark inhibit input	Inactive / Normal
	20-	20-		Fuel Control Mode	Open Loop
24.6 volts	0-<	0		Governor switch state	None
	0	% 5 3	6	Oil pressure state	Low - Ignored
		D		Active governor type	Min
Ecom Configura Available Cust gov Cust gov Engin Engin Vehicle identri Spit Spit OK	tion Cancel	Software r Initial cal r Initial cal r Current ca Current ca Software 8 - X - X	Softw model 999999 nodel 999999 iate 6-29-2 il model 999999 il date 6-29-2 revision 228 3 Emissions (Total Calibri	Active governor mode are and Hardware In 99X Hardware model 99X Manufacture date 1015 Serial number 1015 Cumulative starts 14346 4 11891848 Calibration Checksum 5 ration Checksum	Isochronous

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).

EDIS ECI Target Communications		- 0 X
Eile Page Flash Comm Port Plot/Log Settings	Help	
Controls. Marine	MIL CONTRACTOR OF AN CO	tempting reconnect nnected at 250 kbps
Marine Engine Operation	Multi-Engine CAN Communication Status	Sh.
Engine Speed 0 rpm	Connection:	Shift actuator cc Transmission ac
Manifold Pressure 14.31 psia	Sync mode None None None	Transmission de
Barometric Pressure 13.95 psia	Engine status 32 2 0 0	Transmission shi
Coolant Temperature 144.6 °F	Speed target/actual 191 0 0 pm	Transmission 1st ≘
Intake Air Temperature 111.1 "F	FPP target/actual 30 0 0 %	Transmission 2n
Spark Advance 0.0 "BTDC	MAP target/actual 13.9 4.1 0.0 0.0 psia	
Pulse width 0.0 ms	ECT 145 45 -40 -40 °F	Shift Actu
Vbat 25.0 volts	Oil pressure 0 0 0 0 psig	Shift max engine
Vsw 0.0 volts	Marine Speed Control (MSC) Network Information	Shift engage de
FPP command 0.0 %	MSC cruise command Not Available	Target shift spe
TPS command 30.1 %	MSC increment/decrement status Inactive	Maximum troll sp
	MSC set/clear status	Chiff and an I in I
Multi-Engine Configuration	MSC multi-engine sync command Not Available	Shift actuator N
Multi-engine selection Aux PU2 Select	MSC throttle override command Not Available	Shift actuator N
Multi-engine status Slave 1	Mac nn non-mear mode N/A - Use Default	Shift integrator f
	MSC FPP non-linear mode idle latch N/A - Use Default	Shift integrator a
Multi-Engine Derate Coordination	MSC RPM target 0 rpm	Shift control min
Multi-engine derate coordination Enabled	MSC RPM accel target 0 rpm / sec	Shift control cm
Multi-engine derate reset time 0.0 sec	MSC KPH target 0.0 kph	Shift Lbardwara
Multi-engine derate logic state Offline	MSC KPH accel target 0.00 kph / sec	Shift actuator re
		Shift actuator K
Derate 1	Multi-Engine Gauge Driver Synchronization	Shift Lestimate
Multi-engine Derate 1	ECT muti-engine gauge sync Disabled 🔻	Shift Lestimate a
Derate 2	ECT gauge sync deadband 20 deg F	Shift position fee
Multi-engine Derate 2	OilP mitijenome gauge svnc. Disabled	Shift gear target
	OilP gauge sync deadband 20.0 psig	
Low rev limit 🥥	an Banke shire ananonia I mara haik	Chifferentin
Multi-engine Low rev limit 🥥	ECT gauge sync'd display value OIP gauge sync'd display value	Shift gear target
	150 200 50 100 150	Shift gear engag
Multi-Engine Speed Synchronization	100 250 0 200	Shift I park cont
Multi-engine speed sync Disabled		Shift I park limit
Sync switch source Normal	145 deg F 0 psig	Shift I park dela
Sync command None		Shift I park ramp 🔻
[• [+

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

Flash Comm Port Plot/Log	Help		Eile	Page	Flash Comm Port	Plot/Log	Help
Main Connected	EControls, Inc. Control and Instrumentation Specialized	Connected at 19200 bps	4	-	Main Connected	(Preparts)	ECC

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.

Cust	tomer Configuration Information		Activ	e governor type e governor mode	Gov3	a		Customer Configu	uration Information
ust hardware name/number 530 Just software name/number 582	00090		Software a	and Hardware Inf	ormation		Cust hardware name/numbe	53000090	
Cust governor cal name 508 Cust governor cal date 3-	60Hz NG and LP Govs 12-2015	Software model Initial cal model	99999999X 99999999X	Hardware model Manufacture date	2492305A 11-13-2014		Cust governor cal name Cust governor cal date	50860Hz NG and LF	P Govs
Engine part number		Current cal model	99999999X 6-29-2015	Hour meter Cumulative starts	0.970	hours starts	Engine part number		
ehicle identification number NOI Displacement 7	NE .3 L Cylinders 8	Software revision	228 34346	4 118918480	2		Vehicle identification number Displacement	r NONE t 7.3 L	Cylinders 8
Spark system type Coil Firing Order 1	Per Cylinder • 5 • 7 • 2 • 6 • 3 • 4 • 8 • X •	F T	missions Calibration	tion Checksum	\$30D239C3 \$25686ECE		Spark system type Firing Order	Coil Per Cylinder 1 - 5 - 7 - 2	- 6 - 3 - 4 - 8

** Steps 1-8 should be repeated if the SLAVE 4G Display is closed while the engine is off. <u>At no time should 4G Display be left communicating</u> <u>with the Master ECM on its own.</u> 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		