Service Bulletin

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Zeus Guardian Strategy and Audio Warning Updates

NOTICE
Revised August 2018. This bulletin supersedes the previous bulletin number 2017-61R2, October 2017.

Models Affected

Models Covered	Year
Zeus LH and KH Pods in Vessels with Design 1 Joysticks	2015–2017

62641

Design 1 joystick

Scope

Worldwide

NOTICE
The service technician performing the procedures described in the bulletin must read and understand the entire service bulletin before attempting a reflash procedure. Failure to follow all service bulletin instructions and the instruction shown in CDS G3 during the reflash process may lead to a reflash failure, resulting in an inoperable or disabled vessel.

Situation

Vessels equipped with Zeus propulsion systems in the affected model range require a software reflash that includes a new engine Guardian strategy. The updated software will generate an alarm and reduce power when the exhaust temperature threshold is exceeded. A critical exhaust temperature overheat will shutdown the engine.

In addition, all vessels within the affected range require a test for audio warning horn functionality. Follow the horn test procedures outlined in this bulletin for testing the warning horn. Contact Mercury Technical Service for further instructions if the horn test fails.

If the horn test is successful, follow the procedures in this bulletin to update the vessel software to the latest calibration.

Compatible Software Combinations

These software combinations are compatible and can be reflashed by a dealer technician using CDS G3.

Port and Starboard Modules	Pre Reflash Cal ID
CCM	CCM13ZAXXPAAF_000G_JPP_P01_000
SIM	SIM11ZADXPAAB_PDJQAX_P05_p000

Port and Starboard Modules	Post Reflash Cal ID
CCM	CCM18ZAXXPAAB_000C_JPZ_P04_000
SIM	SIM11ZADXPAAB_PDJQAX_P06_000

Vessels within the affected model range with compatible software can be updated using the reflash procedures described in this bulletin. However, software compatibility issues in vessels with incompatible SIM and CCM combinations must be resolved by a Mercury Technical Account Manager using Mototune®. Contact Mercury Technical Service at 920-929-5884 if the SIM and CCM combination is incompatible. Outside the United States and Canada: contact your local Mercury Marine International office.

New Guardian Strategy for Exhaust Temperature

Fault	Description
Exhaust_Temp_High	• Caution horn—6 beeps • Nonsticky • Exhaust temperature high, service engine soon text • 50% demand limit
Exhaust_Temp_Critical	• Critical horn—6 second beep • Sticky • Exhaust temperature critical, return to port immediately text • Engine shutdown action

IMPORTANT: The default value for a failed (high/low) exhaust temperature sensor is set to 0° C. This will prevent Guardian during a failed sensor scenario.

Use this service bulletin and CDS G3 to perform the reflash. A vessel personality must be installed upon completion of the software reflash. Ensure that you have a vessel personality available before reflashing.

Use CDS G3 to query the software version of each CCM in the vessel's Zeus control system. The CDS G3 **Home Page**, will notify you if a later version of the installed Zeus module software is available. Use the **Zeus Reflash Guide** contained in this bulletin to determine the configuration activity that must be performed.

Required Horn Test Procedure

The horn test procedure must be performed on both engines prior to and after the software reflash.

IMPORTANT: Test the vessel horn using the following procedure to ensure horn function. If the horn is not functioning, contact Mercury Technical Service in the U.S. and Canada. Outside the United States and Canada: contact your local Mercury Marine International office.
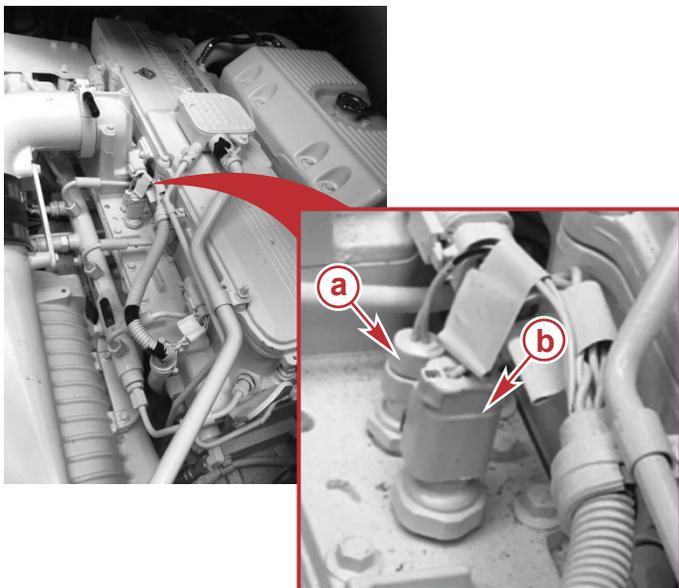
1. Turn all keys on.
2. Ensure the VesselView is on, agree to the license, and ensure that there is visible data from both engines showing up on the screen.

QSC Models

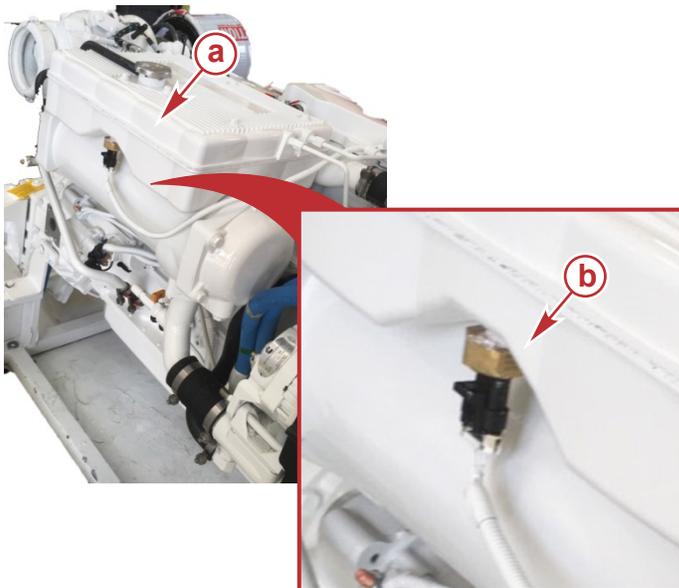a. Disconnect the intake manifold temperature sensor.

a - Intake manifold temperature sensor
b - Boost pressure sensor

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b. Ensure that a fault has occurred by viewing the VesselView screen for the fault indication. Alternatively you can observe CDS G3 in the module data screen. A module that is faulting will indicate so in the right hand column of CDS G3's module data. Ensure the Intake Manifold Temperature fault you are triggering shows up in the starboard or port SIM.

QSB Models

a. Disconnect the coolant level sensor.

a - Reservoir
b - Coolant level sensor

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b. Ensure that a fault has occurred by viewing the VesselView screen for the fault indication. Alternatively you can observe CDS G3 in the module data screen. A module that is faulting will indicate so in the right hand column of CDS G3's module data. Ensure the Coolant Level Sensor fault you are triggering shows up in the starboard or port SIM.

3. The audio warning system should sound for six one-second intervals.

4. Turn the keys off and pull the electronic remote control handles back to reverse wide open.

5. Turn the keys on again and verify the presence of the faults and the audible caution horn—6 beeps.

6. Connect the sensor that was disconnected during the test procedure.

7. If the audio warning system did not sound audibly, contact Mercury Diesel customer service. In the US and Canada call (920) 929 5884. Outside the United States and Canada: contact your local Mercury Marine International office.
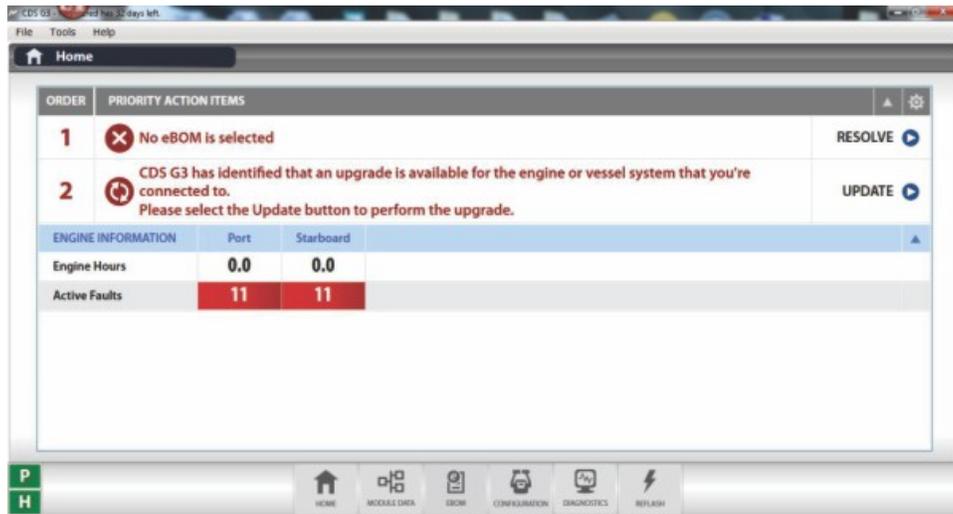
Owner Notification

Zeus-equipped vessels that contain CCM 13 or 16 software packages and design 1 joysticks should be reflashed to the latest version of software using G3 2018 Update 9 or above during the next service interval.

Connect to CDS G3

IMPORTANT: G3 2018 Update 9 or above must be used to complete the reflash. To verify your current version of CDS G3, click on the word Help at the top of the G3 screen and select About. The current version will be displayed.

Connect the CDS G3 to the vessel, then turn the keys on. The **Home** screen, which is the first screen shown when CDS G3 launches, will list any priority action items that must be addressed, including software updates. One of these items may be **CDS G3 has identified that an upgrade is available for the engine or vessel system that you're connected to. Please select the Update button to perform the upgrade**, as shown in the following screenshot.

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On the **Home** screen, select the **Update** button to the right of the priority action item that indicates there are available upgrades. Clicking on this will call up the **Reflash Package Browser** from which you can select the reflash packages that are available for your vessel.

IMPORTANT: Disconnecting SmartCraft gauges or VesselView Link is required before reflashing. If the SmartCraft gauges or VesselView Link is not disconnected from the junction box connection point, the reflash may not complete properly. If this occurs, a module may appear to have failed. It will disappear from the CDS G3 module data screen and will not reappear even with a key cycle. If this occurs, the keys must be turned off, throttle/shift levers placed in reverse wide-open throttle, and the clean power supply (4-pin connector) to the VIP disconnected. Wait about 10 seconds before reconnecting the clean power supply to the VIP, then turn the keys back on with the levers in neutral, and check for the module to show up in the CDS G3 module data screen. Finally, attempt the reflash again by either going to the Home screen or to the Reflash screen.

Reflash Checklist

Use the following checklist to guide you through the process.

☐ Hull ID number _____

☐ Engine serial numbers:

    ☐ Starboard _____

    ☐ Center_____

    ☐ Port _____

☐ Current personality name:_____

☐ Unplug VesselView Link and SmartCraft gauges from the J-boxes

☐ Reflash the modules in the predetermined order and follow all instructions provided during reflash by G3:

    ☐ Reconnect VesselView Link and SmartCraft gauges to the J-boxes

    ☐ Configure the auxiliary joystick (if equipped)

    ☐ Use the Centering procedure in G3 for the steering wheel (applies to design 1 joysticks only)

    ☐ Set the running drive alignment

Reflash Process

Refer to **Mercury Diesel service bulletin 2018-63** to complete the process.

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The technician will no longer need to contact Mercury Technical Service to obtain the Vessel Personality prior to beginning the reflash process. G3 will now record and rewrite the vessel personality during the reflash process.

A video of the reflash process can be found on MercNET or by following this link: https://p.widencdn.net/zpv3s8/New-G3-reflash- 6_4_18.

Zeus Reflash Table

Configuration Procedure That Must be Performed After Module Reflash	CCM Reflash	SIM Reflash
City ID Assignment and Lever Adapt	Yes	–
Steering Wheel Centering	Yes	–
Enable Auxiliary Joystick (if Equipped)	Yes	–
Cycle Key Switches to Set City IDs	–	Yes

Warranty

United States and Canada: Mercury Marine will credit the dealer for the cost of parts and labor. Submit a warranty claim through your normal warranty processing channel, listing:

1. The Zeus pod serial number
2. The labor for reflashing the software:
   - Labor: 0.5 hour per boat
   - Flat rate code: SB05
   - Part code: 499
   - Failure code: 00

Outside the United States and Canada: Follow instructions issued by your local office or by your distributor.