

Circulate to: Sales Manager Accounting Service Manager Technician Parts Manager

PCM 09 Calibration Update—Optional

NOTICE

Revised December 2015. This bulletin supersedes the previous bulletin number 2015-01 February 2015.

Models Affected

All ECT models equipped with a malfunction indicator light (MIL) or check-engine light and Non-ECT 8.2L models. Models with other brand gauges with check-engine lights will also be included within the serial number ranges.



47594

Models	Serial Numbers
Sterndrive	
3.0L, 4.3L, 5.0L	MIL/check-engine light equipped engines with S/N 2A446568 and below
350/377 MAG	MIL/check-engine light equipped engines with S/N 2A446467 and below
8.2L ECT	MIL/check-engine light equipped engines with S/N 2A446464 and below
8.2L Non-ECT	Engines with S/N 2A446567 and below
Inboard	
5.7L, 6.2L, 8.2L	MIL/check-engine light equipped engines with S/N 2A446469 and below
TowSport	
5.7L	MIL/check-engine light equipped engines with S/N 2A446469 and below
Scorpion	MIL/check-engine light equipped engines with S/N 2A460079 and below

Scope

Worldwide

THE INFORMATION IN THIS DOCUMENT IS CONFIDENTIAL AND PROTECTED BY COPYRIGHT AND IS THE PROPERTY OF MERCURY MARINE.

This document is provided for the sole and exclusive use of the original recipient as prescribed by Mercury Marine and may not be distributed or copied, digitally or otherwise, without the prior written consent of Mercury Marine.

Situation

Mercury MerCruiser has released an optional calibration update solely for customers that complain of noncritical horn soundings. The calibration includes an updated audio warning system and adjustments to specific fault parameters.

Correction—Not Mandatory

Reflash packages are available that will reduce the beeps from every minute to one beep cycle per fault per key cycle. In addition, the audio warning strategy has changed some fault parameters for low voltage, water pressure, and oil pressure. CDS G3 has all of the calibrations listed here as a service-only update.

IMPORTANT: This is not a mandatory update to reflash all of the ECT engines that have malfunction indicator lights, and it is not a service update recall.

A G3 service calibration update reflash is available and may be needed to address a field issue listed here in the notes column.

Connect CDS G3 to determine if one of the reflash packages shown in the following **Calibration List** is correct for your application. Reflash the PCM to the new calibration, and reconfigure the vessel interfaces as necessary.

Provide the customer a copy of the new audio warning system's functions by copying the last page of this bulletin. Customers should use this document to replace the audio warning system information in their owner's manuals.

Calibration List

Mechanical ECT Malfunction Indicator Lights (MIL) Only Calibration Update List (for Engines With MIL Only)

Engine	Latest Calibration	Superseded Calibration	Notes
3.0L ALPHA ECT RWC	8M0099110	8M2022540	Calibration upgrade: Horn Strategy—Battery Voltage. The owner's manual must have an update to explain the new horn strategy.
3.0L ALPHA ECT FWC	8M0099111	8M2022541	Calibration upgrade: Horn Strategy—Battery Voltage. The owner's manual must have an update to explain the new horn strategy.
4.3L ALPHA ECT RWC	8M0099112	8M2022542	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure—Shift Strategy. The owner's manual must have an update to explain the new horn strategy.
4.3L ALPHA ECT FWC	8M0099113	8M2022543	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure—Shift Strategy. The owner's manual must have an update to explain the new horn strategy.
4.3L BRAVO ECT RWC	8M0099114	8M2022544	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
4.3L BRAVO ECT FWC	8M0099115	8M2022545	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
5.0L ALPHA ECT RWC	8M0099116	8M2022546	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
5.0L ALPHA ECT FWC	8M0099117	8M2022547	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
5.0L BRAVO ECT RWC	8M0099119	8M2022548	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.

THE INFORMATION IN THIS DOCUMENT IS CONFIDENTIAL AND PROTECTED BY COPYRIGHT AND IS THE PROPERTY OF MERCURY MARINE.

This document is provided for the sole and exclusive use of the original recipient as prescribed by Mercury Marine and may not be distributed or copied, digitally or otherwise, without the prior written consent of Mercury Marine.

Engine	Latest Calibration	Superseded Calibration	Notes
5.0L BRAVO ECT FWC	8M0099121	8M2022549	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
5.7L ALPHA ECT RWC	8M0099122	8M2022550	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
5.7L ALPHA ECT FWC	8M0099123	8M2022551	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
5.7L BRAVO ECT RWC	8M0099125	8M2022552	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
5.7L BRAVO ECT FWC	8M0099127	8M2022553	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
5.7L MIE ECT RWC	8M0099129	8M2022554	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
5.7L MIE ECT FWC	8M0099131	8M2022555	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
5.7L ECT SKI	8M0099132	8M2022556	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
MX 6.2L BRAVO ECT RWC	8M0099134	8M2022557	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
MX 6.2L BRAVO ECT FWC	8M0099137	8M2022558	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
MX 6.2L MIE ECT RWC	8M0099138	8M2022559	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
MX 6.2L MIE ECT FWC	8M0099141	8M2022560	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
8.2L MAG BRAVO ECT Single-Catalyst Exhaust	8M0099142	8M0084298	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure—Oil Pressure Strategy. The owner's manual must have an update to explain the new horn strategy.
8.2L H.O. BRAVO ECT Single-Catalyst Exhaust	8M0099143	8M0071498	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure—Oil Pressure Strategy. The owner's manual must have an update to explain the new horn strategy.

DTS ECT Malfunction Indicator Lights (MIL) Only Calibration Update List (for Engines With MIL Only)

Engine	Latest Calibration	Superseded Calibration	Notes
5.0L BRAVO DTS ECT RWC	8M0099118	8M2022561	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.

THE INFORMATION IN THIS DOCUMENT IS CONFIDENTIAL AND PROTECTED BY COPYRIGHT AND IS THE PROPERTY OF MERCURY MARINE.

This document is provided for the sole and exclusive use of the original recipient as prescribed by Mercury Marine and may not be distributed or copied, digitally or otherwise, without the prior written consent of Mercury Marine.

Engine	Latest Calibration	Superseded Calibration	Notes
5.0L BRAVO DTS ECT FWC	8M0099120	8M2022562	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
5.7L BRAVO DTS ECT RWC	8M0099124	8M2022563	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
5.7L BRAVO DTS ECT FWC	8M0099126	8M2022564	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
5.7L MIE DTS ECT RWC	8M0099128	8M2022565	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
5.7L MIE DTS ECT FWC	8M0099130	8M2022566	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
350 SCORPION DTS ECT	8M0099133	8M2022567	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
MX 6.2L BRAVO DTS ECT RWC	8M0099135	8M2022568	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
MX 6.2L BRAVO DTS ECT FWC	8M0099136	8M2022569	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
MX 6.2L MIE DTS ECT RWC	8M0099139	8M2022570	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
MX 6.2L MIE DTS ECT FWC	8M0099140	8M2022571	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure. The owner's manual must have an update to explain the new horn strategy.
8.2L MAG BRAVO DTS ECT Single-Catalyst Exhaust	8M0099144	8M0084299	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure—Oil Pressure Strategy. The owner's manual must have an update to explain the new horn strategy.
8.2L H.O. BRAVO DTS ECT Single-Catalyst Exhaust	8M0099145	8M0071497	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure—Oil Pressure Strategy. The owner's manual must have an update to explain the new horn strategy.
8.2L MAG MIE DTS ECT Single-Catalyst Exhaust	8M0099146	8M0084300	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure—Oil Pressure Strategy. The owner's manual must have an update to explain the new horn strategy.
8.2L H.O. MIE DTS ECT Single-Catalyst Exhaust	8M0099147	8M0071499	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure—Oil Pressure Strategy. The owner's manual must have an update to explain the new horn strategy.

8.2L Non-ECT Calibration Update List

Engine	Latest Calibration	Superseded Calibration	Notes
8.2L BRAVO	8M0099830	8M2020278	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure—Oil Pressure Strategy. The owner's manual must have an update to explain the new horn strategy.

THE INFORMATION IN THIS DOCUMENT IS CONFIDENTIAL AND PROTECTED BY COPYRIGHT AND IS THE PROPERTY OF MERCURY MARINE.

This document is provided for the sole and exclusive use of the original recipient as prescribed by Mercury Marine and may not be distributed or copied, digitally or otherwise, without the prior written consent of Mercury Marine.

Engine	Latest Calibration	Superseded Calibration	Notes
8.2L MAG BRAVO DTS	8M0099831	8M2020280	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure—Oil Pressure Strategy. The owner's manual must have an update to explain the new horn strategy.
8.2L H.O. BRAVO DTS	8M0099832	8M2020281	Calibration upgrade: Horn Strategy—Battery Voltage—Block Pressure—Oil Pressure Strategy. The owner's manual must have an update to explain the new horn strategy.

Warranty

Mercury Marine will credit the dealer for the cost of the labor. Submit a warranty claim through your normal warranty—processing channel, listing the following information:

- Flat rate code: MJ 40
- Part code: 731
- Failure code: 00

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

THE INFORMATION IN THIS DOCUMENT IS CONFIDENTIAL AND PROTECTED BY COPYRIGHT AND IS THE PROPERTY OF MERCURY MARINE.

This document is provided for the sole and exclusive use of the original recipient as prescribed by Mercury Marine and may not be distributed or copied, digitally or otherwise, without the prior written consent of Mercury Marine.

Audio Warning System

IMPORTANT: The audio warning system alerts the operator that a problem has occurred. It does not protect the engine from damage.

Most faults cause the warning horn circuit to activate. How the warning horn activates depends on the severity of the problem.

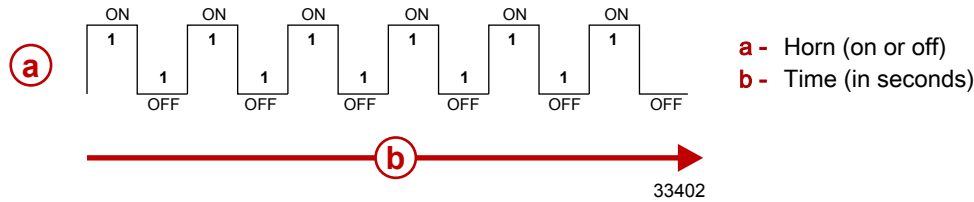
There are two warning horn states:

- Caution
- Critical

There is also an alarm that sounds if the helm has not been properly configured using the G3 service tool.

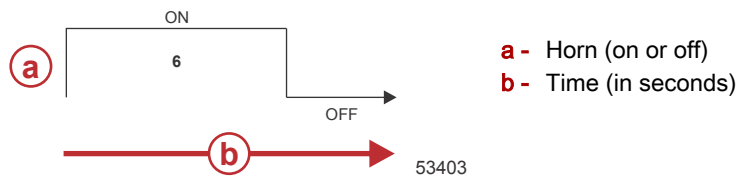
Caution

If a caution state is detected, the audio warning system will sound for six one-second intervals.



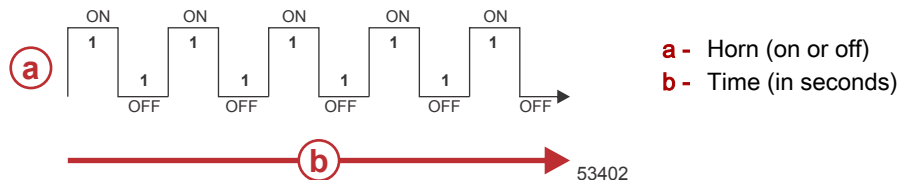
Critical

If a critical state is detected, the audio warning system sounds for six seconds and then turns off.



Nonconfigured Alarm—DTS Only

If the helm has not been properly configured using the G3 service tool, the audio warning system will sound for five one-second intervals.



Testing the Audio Warning System

1. Turn the key switch to the on position without cranking the engine.
2. Listen for the audio alarm. The alarm will sound if the system is functioning correctly.

THE INFORMATION IN THIS DOCUMENT IS CONFIDENTIAL AND PROTECTED BY COPYRIGHT AND IS THE PROPERTY OF MERCURY MARINE.

This document is provided for the sole and exclusive use of the original recipient as prescribed by Mercury Marine and may not be distributed or copied, digitally or otherwise, without the prior written consent of Mercury Marine.