



Service Bulletin

Bulletin No. 2007-03R1
OEM No. 2007-03R1

Circulate to: Sales Manager Accounting Service Manager Technician Parts Manager

Propulsion Control Module (PCM) Recalibration—135/150/175 Verado and 200/225/250/275 Verado

NOTICE
Revised April 2018. This bulletin supersedes the previous bulletin number 2007-03 March 2007.
CDS recalibration kits are no longer available.

Models Affected

Models Covered	Serial Number
135/150/175 Verado	USA 1B460633 and below
200/225/250/275 Verado	USA 1B460633 and below
135/150 Verado	Belgium 0P481104 and below
200/225/250/275 Verado	Belgium 0P481104 and below

Scope

Worldwide

Situation

Mercury Marine has identified a potential problem within the calibration of the propulsion control module (PCM), which impacts the control system on the Verado outboards listed at the beginning of this bulletin. The possibility exists for the calibration to become unstable, which can cause the diagnostic system to falsely activate the Guardian program and inaccurately store faults. This results in the engine operating at reduced power and the sounding of the warning horn. The fault that is typically stored is Fault 237 (Excessive Knock); however, other faults may also be stored. Mercury Marine has revised this portion of the PCM calibration to prevent any possibility of this happening in the future. All affected product will require a new calibration to be programmed into the PCM.

Mercury Marine is also taking this opportunity to respond to the voice of our valued customers. Since the introduction of the Verado product, Mercury Marine has received concerns regarding the warning horn system. These concerns have centered on the complexity of the warning horn system, as well as the frequency of noncritical nuisance horns. As part of the PCM calibration upgrade program, the Verado warning horn system has also been updated to address these concerns. Please refer to the attached warning horn instructions. These instructions supersede and replace the table published in the customer's Outboard Operation, Maintenance, and Warranty manual. These revised warning horn instructions are to be supplied to customers.

Correction

Verado Qualified dealerships will need to recalibrate the PCMs on affected Verado engines. Verado engines located at dealerships other than those that are Verado Qualified will need to be directed to the nearest Verado Qualified dealership.

Verado Qualified dealerships that currently have a CDS Recalibration Kit may continue to utilize it to update the engine's PCM calibration. Dealers that do not currently have a working CDS Recalibration Kit will need to send the PCM to Mercury Marine for recalibration. Contact Mercury Technical Service at 920-929-5884 for authorization and shipping instructions.

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.

Tools Required

CDS Recalibration Kits are no longer available. Existing operational kits may continue to be utilized to perform the required update. CDS G3 is not able to perform the calibration update on the affected engines.

CDS Recalibration Kit Components

Qty.	Description	Part Number
1	USB security token ¹ .	NA
1	Reflash cable (connects to SmartComms)	84-822560A15
1	PCM adapter cable (connects to PCM)	84-884358T01
1	Set of Avery 8160 white labels	Avery 8160
1	Set of Avery 8662 clear labels (covers the white label)	Avery 8662
1	Instruction sheet	90-899959

NOTE: This table is listed for reference only. Contact Mercury Technical Service and arrange to send in the PCM for recalibration if you do not already have an operational CDS Recalibration Kit.

Dealer Outboard Inventory

All affected outboards in dealer inventory should have their PCMs recalibrated prior to customer delivery. Outboards brought in for other service work may also be inspected and/or corrected as required.

Flat Rate

NOTE: The affected engines are beyond warranty coverage. The following flat rates are for reference only.

Single Outboard Package

- 0.6 hour labor
- Warranty flat rate code: SB06
- Part code: 731
- Failure code: 00

-or-

Dual Outboard Package

- 0.9 hour labor
- Warranty flat rate code: SB09
- Part code: 731
- Failure code: 00

-or-

Triple Outboard Package

- 1.2 hour labor
- Warranty flat rate code: SB10 and SB02
- Part code: 731
- Failure code: 00

-or-

Quad Outboard Package

- 1.5 hour labor
- Warranty flat rate code: SB10 and SB05
- Part code: 731
- Failure code: 00

1. The USB security token is preprogrammed with your dealer number and will only work with the CDS unit registered with the same dealer number.

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.

IMPORTANT: The updated Warning System information printed on this insert should be carefully reviewed and placed at the Warning System page of your Verado Outboard Operation, Maintenance and Warranty Manual. Refer to Features and Controls - Warning System in the Table of Contents. This new information replaces the Warning System information printed in your owner's manual and details the revised operation of your Verado's warning system.

Warning System

WARNING HORN SIGNALS

When the key switch is turned to the ON position, the horn (located on the command module harness) will turn on for a moment as a test to indicate the horn is working.

There are two types of warning horns to alert the operator of an active problem within the engine's operating system.

1. **Continuous six second beep:** Indicates a critical engine condition. Depending on the condition, the Engine Guardian System may engage and protect the engine by limiting its power. You should return to port immediately and contact your servicing dealer.
2. **Intermittent short beeps for six seconds:** Indicates a noncritical engine condition. This condition does not require immediate attention. You may continue using your boat, however, depending on the nature of the problem, the engine's power may be limited by the Engine Guardian System (see Engine Guardian System following) to protect the engine. You should contact your servicing dealer at your earliest convenience.

It is important to note that in either of the above scenarios, the horn will only sound one time. If you key the engine off and restart it, the horn will sound again, one time, if the fault is still present. For visual display of the specific engine functions and additional engine data, refer to **SmartCraft Product** information, following.

A few of the noncritical conditions indicated by the intermittent short beeps for six seconds can be corrected by the operator.

These operator correctable conditions are as follows:

- Water in the engine mounted fuel filter. Refer to **Maintenance - Water-Separating Fuel Filter.**
- Cooling system (water pressure and/or engine temperature) problem. Stop the engine and check the water intake holes in the lower unit for obstruction.
- Low engine oil level. Refer to **Fuel and Oil - Checking and Adding Engine Oil.**

ENGINE GUARDIAN SYSTEM

The Engine Guardian System monitors the critical sensors on the engine for any early indications of problems. Engine Guardian is functional whenever your engine is operating, so you never have to be concerned about whether or not you are protected. The system will respond to a problem by sounding the warning horn for six seconds and/or reducing engine power in order to provide engine protection.

If the Guardian System has been activated, reduce throttle speed. The problem will need to be identified and corrected, if possible. The system must be reset before the engine will operate at higher speeds. Moving the throttle lever back to the idle position will reset the system.

SMARTCRAFT PRODUCT

A Mercury SmartCraft System instrument package can be purchased for this outboard. A few of the functions the instrument package will display are engine RPM, coolant temperature, oil pressure, water pressure, battery voltage, fuel consumption and engine operating hours.

The SmartCraft Instrument package will also aid in Engine Guardian diagnostics. The SmartCraft instrument package will display critical engine alarm data and potential problems.