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## 6 Inch Exhaust Riser Replacement

### Models Affected

Models Covered	Serial Number Or Year
ECT 5.0L, 350, 377, 5.7L, and 6.2L engine models for Sterndrive, Inboard, and TowSport	2A437183 and below

### Scope

The scope of the bulletin is limited to the following states: California, Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, Virginia, Washington and Washington, DC. Also, engines must be within 24 months from the registration date to comply.

### Situation

Mercury MerCruiser has identified a potential issue where post O2 sensors are failing from thermal shock cycles due to a high amount of condensation inside the exhaust riser. These failures are more common on the east and west coast in early spring when the air temperature is cold and when there is high humidity associated with warmer air temperatures. These failures are not due to water intrusion.

**NOTE:** *Not all engines with 6 inch exhaust risers are prone to this failure.*

### Correction

The engines listed under **Models Affected** will need to have their history checked for repeat post O2 sensor failures. The engines that have been identified with repeat post O2 sensor failures will need to have the 6 inch exhaust risers replaced with the new exhaust riser kit (8M0094682).

**NOTE:** *The following table consists of possible related active or freeze frame faults using CDS G3 that may appear which indicates there has been a problem with the post O2 sensor failing from thermal shock cycles due to a high amount of condensation inside the exhaust riser.*

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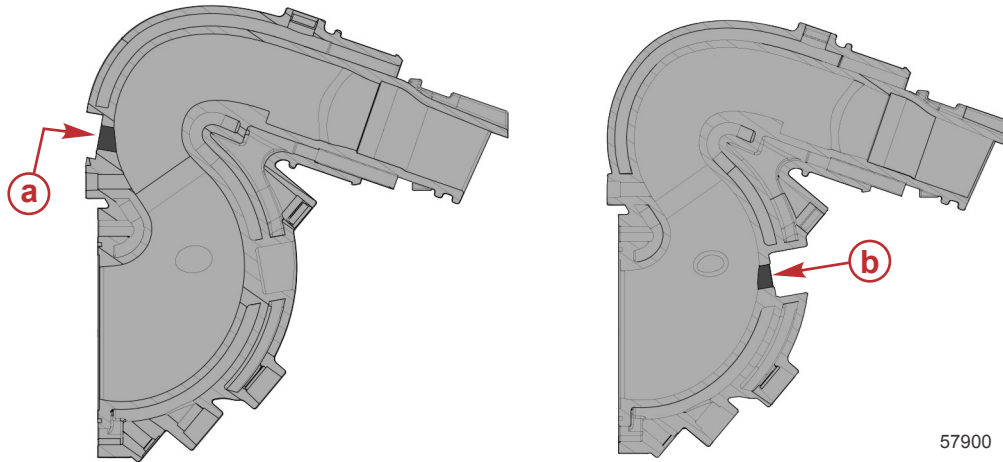
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Faults		
319	O2 Control_ITerm High PORT	OBDM Fault: PORT Cylinder Bank Fuel Trim Value Is Too Positive (Too Rich)
320	O2 Control_ITerm Low PORT	OBDM Fault: PORT Cylinder Bank Fuel Trim Value Is Too Negative (Too Lean)
321	O2 Control_ITerm High STBD	OBDM Fault: STBD Cylinder Bank Fuel Trim Value Is Too Positive (Too Rich)
322	O2 Control_ITerm Low STBD	OBDM Fault: STBD Cylinder Bank Fuel Trim Value Is Too Negative (Too Lean)
354	O2HC_Output Fault	PORT Post - Catalyst O2 Sensor (C)
355	O2HD_Output Fault	STBD Post - Catalyst O2 Sensor (D)
389	PO2S_Lea Range STBD	STBD Post - Catalyst O2 Sensor (D) Stuck Reporting LEAN: Check PCM-to-Sensor Circuit
390	PO2S_Rich Range STBD	STBD Post - Catalyst O2 Sensor (D) Stuck Reporting RICH: Check PCM-to-Sensor Circuit
391	PO2S_Lea Range PORT	PORT Post - Catalyst O2 Sensor (C) Stuck Reporting LEAN: Check PCM-to-Sensor Circuit
392	PO2S_Rich Range PORT	PORT Post - Catalyst O2 Sensor (C) Stuck Reporting RICH: Check PCM-to-Sensor Circuit

## 6 Inch Exhaust Riser Comparison

The following image shows the difference between the new style and old style exhaust risers. This will act as a quick visual for the technician when inspecting the engine for repeat post O2 sensor failures. Engines with the new style exhaust risers will not have to be checked for repeat post O2 sensor failures.



- a** - New style exhaust riser post O2 sensor location
- b** - Old style exhaust riser post O2 sensor location

## Parts Required

Engines that have been properly diagnosed with post O2 sensor failures will need the following installed:

Qty.	Description	Part Number
1	6 inch exhaust riser kit	8M0094682
2	Post O2 sensors	8M2003959

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**⚠ WARNING**

Performing service or maintenance without first disconnecting the battery can cause product damage, personal injury, or death due to fire, explosion, electrical shock, or unexpected engine starting. Always disconnect the battery cables from the battery before maintaining, servicing, installing, or removing engine or drive components.

**⚠ CAUTION**

A hot oxygen sensor can cause burns. Do not touch the sensor without first allowing it to cool. Always allow engine components time to reach a safe temperature before installing or servicing engine or drive components.

## Installation

Refer to the appropriate service manual for the installation of the new riser kit and post O2 sensors.

## Owner Notification

A letter will be sent to every registered owner of an affected power package. The letter will advise the owner to take the boat to any Mercury MerCruiser authorized dealer for inspection and repair of their power package. Some affected power packages will have been updated before shipment. Visit MercNET or contact MerCruiser Customer Service or your regional service center to determine whether repairs have already been completed on a given package. As a Mercury MerCruiser dealer, you should also contact affected customers to make them aware of this recall and to schedule an appointment for a repair. A copy of the customer letter is attached.

## 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:

- Engine serial number
- Labor: 1.5 hours per side
- Flat rate code: MX15
- Part code: 513
- Failure code: 00

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

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Dear Mercury MerCruiser Customer:

Thank you for your purchase of a boat powered by a Mercury MerCruiser engine package. We appreciate your business and hope you are enjoying your boat. We are contacting you because we believe that certain repairs to your engine package may be necessary. The repairs will be performed at Mercury's expense.

## **SITUATION**

Mercury Marine has identified a potential issue with some post O2 sensors. In some applications and under certain conditions, the post O2 sensor can experience thermal shock due to condensation inside the exhaust riser. As a result, we would like to have the engine inspected, and repaired (if necessary), in order to ensure continued enjoyable boating. Please work with your dealer to arrange to have the engine inspected.

## **WHAT YOU SHOULD DO**

Contact your authorized Mercury MerCruiser dealer and make arrangements to have the post O2 sensors inspected. The dealer will refer to Mercury MerCruiser Service Bulletin 2015-04 for instructions. You should then deliver your boat and this letter to the dealer. If you are having difficulty obtaining repairs, please contact our Customer Contact Center at (920) 929-5040 between 7:30 AM and 4:30 PM CST for assistance or use the dealer locator feature at [www.mercurymarine.com](http://www.mercurymarine.com).

If you have sold the engine or boat please contact our Registration department at (920) 929-5054 between 7:30 AM and 4:30 PM CST or email us at [registration\\_support@mercmarine.com](mailto:registration_support@mercmarine.com) to provide Mercury with the information on the new owner. Please refer to Mercury MerCruiser Service Bulletin 2015-04 with your information.

## **WHAT WE WILL DO**

We have informed the dealer that this issue may exist, advised them what to look for, and how to address the issue. We will reimburse the dealer for performing the repairs in accordance with the instructions outlined in the service bulletin. There will be no cost to you to have this work performed.

We apologize for the inconvenience this recall may cause you; however, we have taken this action to ensure that your boating experience will be enjoyable and trouble-free.

Sincerely,

Mercury MerCruiser Service Department