

Service Bulletin

Bulletin No. 2011-05R1 OEM No. 2011-04R1

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Sales Manager

Accounting

Service Manager

Technician

Parts Manager

Official Recall Notification: U.S. Federal Boat Safety Act

Possible Incorrect Routing Causing Pinched or Chafed Wires on 3.0 MPI Engine Harness

Scope

Worldwide

Models Affected

Models Covered	Serial Numbers
3.0 MPI Models	1A072812–1A650359

Situation

Mercury MerCruiser has received some customer complaints concerning starters that do not operate or crank the engine. This problem may be caused by a blown 90-amp fuse (at the starter solenoid) or a 50-amp circuit breaker that has tripped. This interruption of electrical current may be caused by incorrect routing of a portion of the engine wiring harness. A wire that is routed below the shift plate mounting bracket can become pinched or chafed through the insulation, causing a direct short circuit to ground, which could create an ignition source. Either the 90-amp fuse or the 50-amp circuit breaker may trip first. If the 90-amp fuse blows first, there is no further opportunity for arcing. If the 50-amp circuit breaker is tripped first, an opportunity for arcing exists until the battery is disconnected.

Owner Notification

A letter will be sent to every registered owner of a 3.0 MPI engine package within the affected serial number range. The letter will advise the owner to take the boat to any Mercury MerCruiser–authorized dealer for inspection and possible repair, rerouting, or replacement of the engine wiring harness.

Dealers: You should also contact affected customers to make them aware of this recall and to schedule an appointment for the repair. A copy of the customer letter is attached.

Boat builders: Please complete this correction on any affected engines within your inventory (uninstalled or already installed).

Correction

ACAUTION

Disconnecting or connecting the battery cables in the incorrect order can cause injury from electrical shock or can damage the electrical system. Always disconnect the negative (-) battery cable first and connect it last.

1. Disconnect the battery cables from the battery.

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2. Inspect the harness below the shift plate mounting bracket for incorrect routing.



Incorrect routing of harness-behind bracket

3. If the harness is routed incorrectly and pinched behind the shift plate mounting bracket, loosen the mounting bracket screws identified below.



Bracket shown removed for clarity

- a Rear mounting screws (2)
- **b** Rear upper mounting screw (1)
- **c** Front lower mounting screw (1)
- 4. Separate the mounting bracket from the engine enough to pull the harness from behind the bracket.



5. Carefully inspect the harness at the area of the pinch.

- 6. If the harness was pinched or scuffed, but the insulation appears to be intact:
 - a. Securely tape the pinched area of the harness with at least two layers of electrical tape.
 - b. Route the wiring harness to match the routing of the harness in the figure in step 8.

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7. If the harness was pinched and the insulation is damaged or revealing bare copper wire:



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Example of damaged insulation and bare wire

- a. Replace the complete engine wiring harness. Order the part number listed in Replacement Parts.
- b. Route the wiring harness to match the routing of the harness in step 8.
- 8. For a harness that shows no damage, prevent damage to the harness by ensuring that the harness is not routed behind the bracket where it could be pinched or chafed through the insulation.



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Correct routing of harness-not behind bracket

9. Tighten the two mounting plate screws to specification.

Description	Nm	lb-in.	lb-ft
Mounting plate screws	11.3	100	-

ACAUTION

Disconnecting or connecting the battery cables in the incorrect order can cause injury from electrical shock or can damage the electrical system. Always disconnect the negative (-) battery cable first and connect it last.

10. Reconnect battery power.

Replacement Parts

Order the following harness assembly to replace the engine wiring harness.

Qty.	Description	Part Number	
1	3.0 MPI engine wiring harness	8M0046177	

Warranty Procedure

United States and Canada: Mercury Marine will credit a dealer for the cost of the engine wiring harness and the labor. Submit the appropriate warranty claim through your normal warranty-processing channel:

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- For complete harness replacement:
 - MerCruiser engine serial number
 - Flate Rate Code and Labor—ME73 and SB05
- For inspection of harness with or without relocation of wiring:
 - MerCruiser engine serial number
 - Flate Rate Code and Labor—SB06

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

Disposition of Failed Parts

United States and Canada: Return to MerCruiser Warranty.

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

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NOTICE FOR RECALL UNDER THE U.S. FEDERAL BOAT SAFETY ACT

Dear Mercury Marine Customer,

Thank you for your purchase of a new boat powered by a Mercury MerCruiser engine. We appreciate your business and hope your engine is performing up to your expectations.

As part of our commitment to superior customer satisfaction, we have determined that it is necessary to inspect and possibly replace the 3.0 MPI engine wiring harness to ensure the safety and reliability of your MerCruiser package. The engine wiring harness may be routed incorrectly, and if it is, it may become damaged from contact with the shift plate mounting bracket. If the harness is damaged, it may short, and if it does, the short may create an ignition source in the engine compartment.

The above condition may cause the starter not to operate or crank the engine. Inspection and possible replacement of the wiring harness should be scheduled and completed as soon as possible. This notification is being provided pursuant to the provisions of the United States Federal Boat Safety Act.

What should you do?

Contact your Mercury MerCruiser dealer and make arrangements for the inspection and possible repair. There will be no cost to you for the inspection or repair. If you have questions or no longer own this boat, contact Mercury MerCruiser Customer Service at +1 405 743 6566. The dealer will refer to Mercury MerCruiser Service Bulletin 2011-05R1 for instructions on inspecting and replacing the engine wiring harness.

Mercury Marine will reimburse the dealer for performing this recall in accordance with the instructions outlined in the service bulletin.

Mercury Marine apologizes for the inconvenience this recall may cause you. However, we have taken this action to ensure that your boating experience will be safe, enjoyable, and trouble-free.

Sincerely,

Mercury Marine Customer Service