

Service Bulletin

Bulletin No. 2008-06 OEM No. 2008-05

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Sales Manager

Accounting

Service Manager

Technician

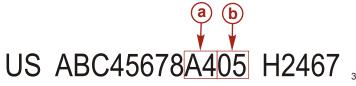
Parts Manager

Official Recall Notification U.S. Federal Boat Safety Act - DTS Command Module Lever Fault

Models Affected

Models Covered	
Mercury/Mariner with Digital Throttle and Shift (DTS)	

All DTS boats with a hull identification number (HIN) of K7 to E8 in the ninth and tenth position, in conjunction with 07 or 08 in the eleventh and twelfth position, need the command module updated to version 76.



a - Month and year of certification or manufacture

A-January	G–July
B–February	H-August
C-March	I–September
D-April	J–October
E-May	K-November
F-June	L-December

b - Model year

Because the recall is focused on remote control units and not on engines, no engine serial number range for the recall is available. Please check for participation under serial number history on MercNET.

Situation

Due to defects in the potentiometers of the electronic remote control (ERC), a single trace lever fault alarm can occur which will create an audible six second alarm tone and generate a fault pop-up on the VesselView screen or SmartCraft instrument, if so equipped. When this fault mode occurs, the Guardian strategy will limit throttle to 65% of available power and the shift position will remain in the gear location the engine was in when the fault was triggered.

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The shift function will not be available when called for by the ERC when the above fault occurs and Guardian is active on command module software versions 75 and earlier. This issue has been reported on early usage, low hour applications, but may occur at other times.

The new software version 76 (P/N 891661R10) will limit throttle to 65% of available power and the shift demand will remain active allowing shifting of the engine, even when the lever fault is triggered.

The system can be reset to enable shifting by one of the following procedures:

For all DTS boat configurations:

 To clear the fault and reinstate shifting, if safe to do so, shut engine or engines off for 15 minutes and restart engine or engines as needed.

For single lever/single engine ERC or dual lever/dual engine ERC applications:

- With the throttle/shift lever or levers in the neutral detent position, turn ignition key or keys to the off position.
- Position the ERC throttle/shift lever or levers to the full reverse–WOT position.
- Wait 15 seconds for the systems to shut down.
- Position the ERC throttle/shift levers to the neutral detent position.
- Restart engine or engines as needed.

For single engine zero effort two lever ERC or dual engine zero effort four lever ERC applications or triple engine zero effort six lever ERC or quad engine zero effort eight lever ERC applications:

- With the throttle lever or levers and shift lever or levers in the neutral detent position, turn ignition key or keys to the off position.
- Position the ERC throttle lever or levers to WOT.
- Position the ERC shift lever or levers to full reverse.
- Wait 15 seconds for the systems to shut down.
- Position the ERC throttle lever or levers to idle.
- Position the ERC shift lever or levers to the neutral detent position.
- Restart engine or engines as needed.

For triple engine dual lever ERC applications (Shadow Mode):

- With the throttle/shift levers in the neutral detent position, turn ignition key to the center engine to the off position, leaving the key switches on outer engines in the on position.
- Position both throttle/shift levers to the full reverse–WOT position.
- Wait 15 seconds for the center engine systems to shut down.
- Position the throttle/shift levers to the neutral detent position.
- Turn the outer two engines key switches to the off position.
- Position the throttle/shift levers to the full reverse–WOT position.
- Wait 15 seconds for the outer two engines systems to shut down.
- Position the throttle/shift levers to the neutral detent position.
- Restart engine or engines as needed.

For quad engine dual lever ERC applications (Shadow Mode):

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- With the throttle/shift levers in the neutral detent position, turn ignition keys to the center two engines to the off position, leaving the key switches on outer two engines in the on position.
- Position both throttle/shift levers to the full reverse–WOT position.
- Wait 15 seconds for the center two engines systems to shut down.
- Position the throttle/shift levers to the neutral detent position.
- Turn the outer two engines key switches to the off position.
- Position the throttle/shift levers to the full reverse–WOT position.
- Wait 15 seconds for the outer two engines systems to shut down.
- Position the throttle/shift levers to the neutral detent position.
- Restart engine or engines as needed.

The corrective service should be performed as soon as possible because the potential loss of control could result in product damage or personal injury. If the vessel must be operated, avoid positioning the ERC at or above the throttle-and-shift positions that originally triggered the ERC fault code.

Notification and Correction

OWNER NOTIFICATION

A letter will be sent to every registered owner of an affected DTS boat. The letter will advise the owner to return their DTS boat to their selling dealer or any Mercury Marine authorized dealer for replacement of the command module. Mercury Marine dealers should also contact their customers to make them aware of this recall and to schedule an appointment for this repair. A copy of the customer letter is attached.

DEALER/OEM INVENTORY

The following items should be completed prior to installation of the ERC kit or prior to final delivery of the DTS equipped vessel to the customer to ensure proper customer satisfaction.

- ERC kits with date codes of November 1, 2007 to May 14, 2008 in dealer stock should be returned to Mercury Marine accompanied by a Mercury Marine warranty claim.
- Command modules in dealer stock:
 - 891661T06 version 72
 - 891661T07 version 73
 - 891661T08 version 75

The above part numbers are to be replaced with part number 891661R10 version 76 command module from Mercury Marine Parts.

- For boats in the affected HIN range in dealer stock without the new version 76 software, a new command module will have to be installed. This will require the readaptation of the ERC levers using the Mercury computer diagnostic system (CDS).
- Not all of the boats recalled in the HIN range will be affected. Inspection of all boats in this recall HIN range is necessary to determine the command module version.
- For DTS boats in the affected HIN range that have been sold by the dealer, the dealer should contact Mercury Marine Technical Service at 920-924-1899 for Outboard DTS boats with HIN and engine serial number information. Canadian dealers should contact their nearest Distribution Center in Canada.

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The selling dealer should also contact their customers to make them aware of this recall
and to schedule an appointment for this repair. Mercury Marine will also send the DTS
boat owner notification of the issue and the need for correction.

PART INTERCHANGEABILITY

- The new command module part number for this recall is 891661R10 and will have version 76 software.
- For all command modules with the orange designation; V.72, V.73, V.75 Mercury Marine will supersede to the new version 76 software (P/N 891661T10) for Gen I and Gen II engines.

INVENTORY AND REPAIR ID

 ERC kits with date codes of November 1, 2007 to May 14, 2008, with the exception of ERC kits within that range that have been reworked, should be returned to Mercury Marine accompanied by a Mercury Marine warranty claim. See below for identifying reworked kits.

Command Module Boxes within Master Kits



a - Label is placed directly over the top of existing version label here

b - Green dot

Kits with version 75 command modules will show "V.75" on the label.

Kits with the command modules will have a sticker over the top of the old V.75 label saying "Kit Contains Command Module Ver 76."

A green dot will be placed next to the box part number label.

NOTE: The command modules within the boxes should each have the new version 76 label.

Master Kits Labeling



3740

A label saying "Kit Contains Command Module Ver 76" will be placed just below the master box part number label, as shown.

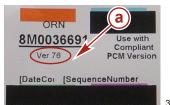
A green dot will be on the master kit part number label in the position shown.

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Command Modules



37416

a - Label is identified with new part number and software Ver 76

The command modules within the boxes that are identified with the label on the outside of the box, should each have the new version 76 label.

Parts Required

- Mercury Marine is asking the complete kits to be returned via Mercury Marine Warranty for units not installed in boats. The replacement kit requirement is dependent on the dealer requirement.
- If only command module replacement is needed (not kits), order one (1) of P/N 891661R10 per engine.
- Please reference the 2008 Mercury Marine Accessories Guide SmartCraft tab or for kit replacement part numbers.

Warranty

Mercury Marine will credit the dealer for the cost of the parts and labor.

Complete the warranty claim listing:

- Outboard engine serial number or check P&A claim box if the parts or kits are from inventory. There must be one claim per engine serial number. Include the boat HIN with the claim.
- Qty. ___ P/N 891661R10 command module as required or kit part number.
- 0.5 hours labor for visual inspection of the command module label for correct software version or for inspection using the Mercury CDS. List flat rate labor code SB05.
- 1.1 hours labor for inspection, command module replacement, and lever adaptation for single helm, single engine boats. List flat rate labor codes SB10 and SB01.
- 1.5 hours labor for inspection, command module replacement, and lever adaptation for dual helm, single engine boats. List flat rate labor codes SB10 and SB05.
- 1.3 hours labor for inspection, command module replacement, and lever adaptation for dual engine boats. List flat rate labor codes SB10 and SB03.
- 1.7 hours labor for inspection, command module replacement, and lever adaptation for dual station, dual engine boats. List flat rate labor codes SB10 and SB07.
- 1.5 hours labor for inspection, command module replacement, and lever adaptation for triple engine boats. List flat rate labor codes SB10 and SB05.
- 1.9 hours labor for inspection, command module replacement, and lever adaptation for dual station, triple engine boats. List flat rate labor codes SB10 and SB09.
- 1.7 hours labor for inspection, command module replacement, and lever adaptation for quad engine boats. List flat rate labor codes SB10 and SB07.

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 2.1 hours labor for inspection, command module replacement, and lever adaptation for dual station, quad engine boats. List flat rate labor codes SB20 and SB01.

Part Code: 946Failure Code: 00

US AND CANADA

Complete and process the claim via MercNET or return a warranty claim form. Mail to: Mercury Marine
P.O. Box 1939
Fond du Lac, WI 54936
Fax +1 (920) 929 5893

INTERNATIONAL

Follow instructions issued by Marine Power International Office or by an authorized Marine Power Distributor.

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Official Notification of Federal Boat Safety Act Recall

Dear Mercury Outboard Owner,

Thank you for your purchase of a Mercury SmartCraft Digital Throttle and Shift (DTS) engine. Mercury Marine is dedicated to providing superior product reliability and customer satisfaction. As part of our commitment to superior customer satisfaction, we have determined that your DTS system must be recalled under the **Federal Boat Safety Act** so that we can perform an inspection of the DTS system software.

What is the condition?

Mercury Marine has identified that the DTS system may encounter the lever fault alarm which will create an audible six second tone and generate a fault pop-up on the VesselView screen or other SmartCraft instrument, if so equipped. When this fault mode occurs, the Guardian strategy will limit throttle to 65% of available power and the shift position will remain in the gear location the engine was in when the fault was triggered. The shift function will not be available when called for by the electronic remote control (ERC). You will not be able to shift out of your current gear position when the above fault occurs and Guardian is active.

To clear the fault and reinstate shifting, if safe to do so, shut engine or engines off for 15 minutes and restart engine or engines as needed. The ERC may or may not trigger the same fault if the ERC is again positioned to the same throttle demand position. It is advisable to operate the engine or engines, if possible, below the demand position where the fault occurred until corrections can be made. The correction should be performed as soon as possible, because the potential loss of control could result in personal injury.

Mercury Marine has identified the cause of this condition and made the appropriate changes to new Guardian system software to allow shifting to occur on demand by the ERC.

What will Mercury Marine do?

Mercury Marine dealers can perform an inspection of your DTS system for the correct system software. Mercury Marine has provided instructions to our dealers on the proper method of correcting the DTS system software if required.

What should you do?

Please contact your Mercury dealer and mention Outboard Service Bulletin 2008-06 to schedule an appointment to have this inspection performed on your DTS system. Your dealer will be able to determine how long this inspection/correction will take. This inspection/correction should be completed as soon as possible to prevent any loss of shift condition from occurring.

Please present this notice to your dealer when you bring your boat in for your service appointment.

What if you have other questions or if you no longer own this engine?

Please contact your Mercury dealer or call Mercury Customer Service at 1-920-929-5040 between 7:30 a.m. and 5:30 p.m., CT.

We have sent this notice in the interest of your continued satisfaction with our product and we sincerely regret any inconvenience this may cause you.

Thank you for boating with Mercury Marine.

Mercury Marine Service