

October, 2006

Re: Product Safety Recall – GM / Pleasurecraft Engine Group 8.1L gasoline marine engines

Dear Crusader Dealer:

This letter is to notify you of an important safety recall campaign initiated by General Motors Corporation involving 8.1L marine engines built from November 1, 2004 through December 21, 2005. The following serial number ranges are affected:

641146,
650062 through **651653,**
660002 through **660739,**
670007 through **670009.**

General Motors has advised us that the Fuel Rail Pulse Dampener Retainer Clip used on the identified engines was not heat treated and may fracture, resulting in inadequate retention of the damper. This condition involves the fuel system, if the dampener comes loose, a fuel leak may result which could, under certain circumstances, cause a **fire and/or explosion**. GM states that one fire has been reported in an engine block used in a motor vehicle.

All owners of our product are required by law to be notified of this recall. We are in the process of contacting all owners who have registered their engines with us. Our registration files, however, contain only a partial list of the total number of engines built. We are requesting that all Dealers make every effort to contact their customers who are subject to this recall or inform the Crusader Service and Warranty Department (address below), of their customer's identity, so that we may contact them as required. A sample customer letter is enclosed. Replacement clips (Part # R048115) are available through Pleasurecraft Engine Group parts. Complete service information is listed on the service bulletin (SUPEG-1006-01) included with this mailing.

You may also have campaign engines that have not been sold still in inventory. Please inspect your inventory for any engine that requires service under this campaign. **Federal law requires you to complete this important campaign on unsold units prior to retail sale.**

Thank you for your prompt attention to this important campaign. We apologize for the inconvenience it presents.

Sincerely,



Mike Genna
Warranty and Service Manager



October, 2006

Re: Product Safety Recall – GM / Crusader Marine Engines 8.1L gasoline marine engines

Dear Boat Owner:

This letter is intended to notify you of an important safety recall campaign involving your boat engine.

Our warranty registration records reveal that you own a boat equipped with a Crusader Engines 8.1L gasoline engine. Crusader Engines purchases the 8.1L base engine from General Motors Corporation. General Motors has advised us that the Fuel Rail Pulse Dampener Retainer Clip used on the identified engines was not heat treated and may fracture, resulting in inadequate retention of the damper. This condition involves the fuel system, if the dampener comes loose, a fuel leak may result which could, under certain circumstances, cause a **fire and/or explosion**. GM states that one fire has been reported in an engine block used in a motor vehicle. The following serial number ranges are affected:

641146,
650062 through **651653,**
660002 through **660739,**
670007 through **670009.**

Crusader Engines strongly recommends that the necessary modifications be scheduled and made as soon as possible, to eliminate the possible unsafe condition. Please contact your dealer as soon as possible to schedule an appointment for this important service. The clip replacement is simple and should be completed within a short period of time. This repair can be made at your dealer's location at no cost to you for parts or labor.

We believe this safety recall is necessary to insure you have the safest and most trouble-free boating experience possible.

If you have any questions regarding this matter or your Crusader engine(s), please contact me at 1-888-527-8799.

At Crusader, your safety and satisfaction is our primary goal.

Sincerely,

T. J. Dellinger
Crusader Captain's Club Concierge

Pleasurecraft Engine Group

#SUPEG-1006-01

Service Update

October, 2006

Coast Guard Safety Recall

#060083T

8.1L Fuel Rail Pulse Dampener Clip Replacement

Engines Affected: 8.1L MPI

Serial Numbers Affected: 455152 through 455643, 465045 through 465072, 641146, 650062 through 651653, 660002 through 660739, and 670007 through 670009

General Motors, the manufacturer of 8.1L base engines, recently notified Pleasurecraft Engine Group that GM Product Safety Recall Bulletin #06080 applies to these engines. The attached bulletin provides the instructions for the replacement of the Fuel Rail Pulse Dampener Retainer Clip.

Coast Guard Safety Recall #060083T addresses the issue of the General Motors reported defect, which relates to safety, and exists in **certain** GM 2005-06 8.1L V8 (RPO L18) engines. Some of these engines have a condition in which the engine Fuel Rail Pulse Damper Retainer Clip may fracture, resulting in inadequate retention of the damper. This condition involves the fuel system, if the dampener comes loose, a fuel leak may result which could, under certain circumstances, cause a **fire and/or explosion**.

All registered owners of affected engines are being notified by Pleasurecraft Engine Group of the need to have the Fuel Rail Pulse Dampener Retainer Clip replaced. When contacted by owners, dealers are required to perform this service at no cost to the customer and to file a warranty claim as indicated, for direct reimbursement from Pleasurecraft Engine Group.

Federal law also requires dealers to replace defective Fuel Rail Pulse Dampener Retainer Clips with the heat treated clips on unsold units prior to retail sale.

CORRECTION

Dealers are to replace the engine Fuel Rail Pulse Dampener Retainer Clip, Part # R048115.



DANGER

To prevent a possible fire or explosion hazard, operate the engine compartment / bilge blower as recommended by the boat manufacturer before starting this service procedure. If the engine compartment is not equipped with a blower, open the engine cover or hatch before starting so as to disperse any gasoline fumes that may be present.



WARNING

When carrying out work on the fuel system make sure the engine is cold. A fuel spill onto a hot surface or electrical components can cause a fire.

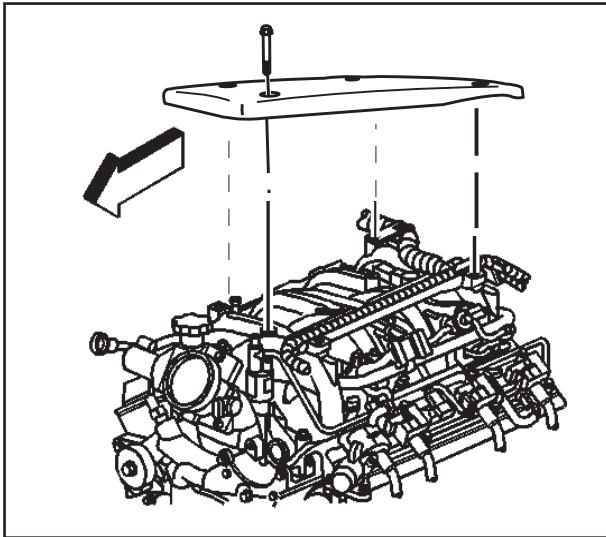


CAUTION

Relieve the fuel system pressure before servicing fuel system components in order to reduce the risk of fire and personal injury. After relieving the system pressure, a small amount of fuel may be released when servicing the fuel lines or connections. In order to reduce the chance of personal injury, cover the regulator and the fuel line fittings with a shop towel before disconnecting. This will catch any fuel that may leak out. Place the towel in an approved container when the disconnection is complete.

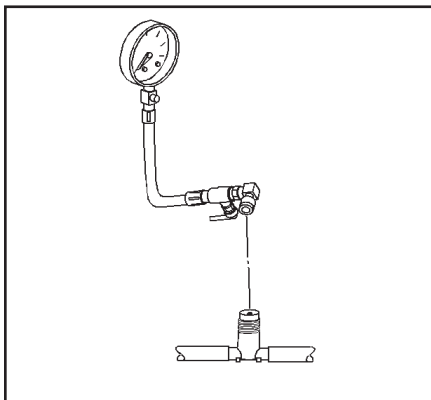
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Service Procedure – Marine Engines

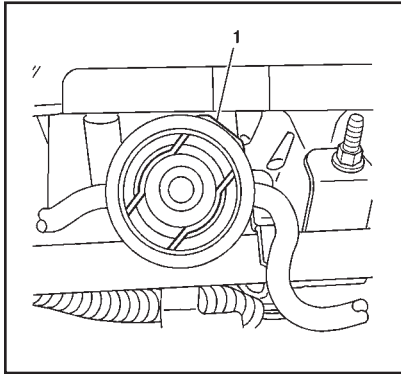


1. Remove the intake hood.

Fuel Pressure Gauge



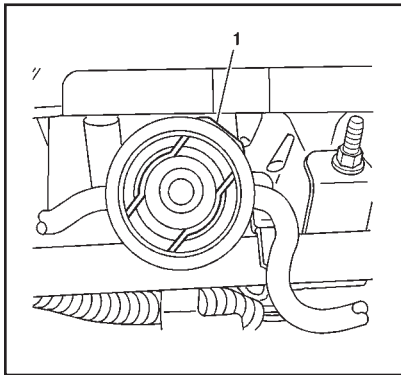
2. Disconnect the negative battery cable.
3. Remove the fuel rail pressure cap.
4. Connect the fuel pressure gauge to the fuel pressure valve. Wrap a shop towel around the fitting while connecting the gage in order to avoid spillage.
5. Install the fuel pressure gauge bleed hose into an approved container.
6. Open the valve on the fuel pressure gauge in order to bleed the system pressure. The fuel connections are now safe for servicing.
7. Close the bleed valve on the fuel pressure gauge.



8. Clean any dirt from the fuel pressure dampener (i.e. damper) retainer (clip) and the surrounding area.

Note: Do not remove the fuel dampener from the fuel rail. If the dampener is removed the fuel dampener O-ring must be replaced.

9. Push down on the fuel dampener and remove the fuel pressure dampener clip (1) and discard.



WARNING

When installing the new Fuel Rail Pulse Dampener Clip, ensure the clip is retained in the guide slots on BOTH sides of the Pulse Dampener Housing. If both clip ends are not in the guide slot, the Pulse Dampener may come loose and a fuel leak may result which could, under certain circumstances, cause a fire and/or explosion.

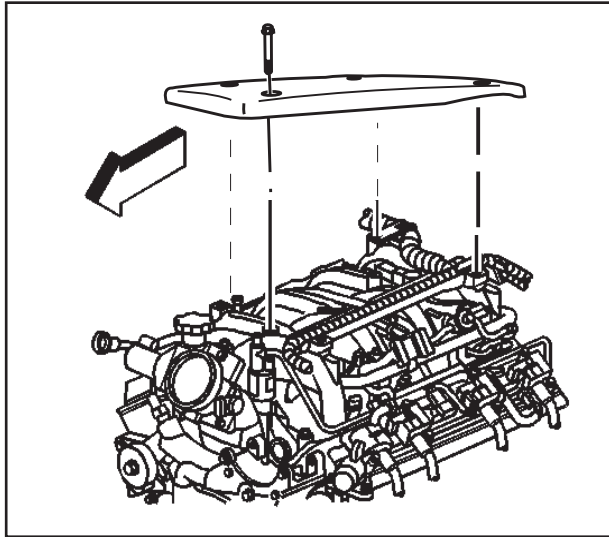
10. Push down on the fuel dampener and install the new fuel pressure dampener clip (1).
11. Connect the negative battery cable.
12. Use the following procedure to inspect for leaks. Follow these steps exactly as presented. **DO NOT start the engine until you are instructed to do so.** You must verify there are no fuel leaks during the fuel pump priming sequence before proceeding further.
 - 12.1 Turn the ignition **ON**, with the engine **OFF**.
 - 12.2 Observe that fuel pressure rises while the fuel pumps run.
 - 12.3 Turn the ignition OFF for 10 seconds.
 - 12.4 Turn the ignition **ON**, with the engine **OFF**.
 - 12.5 Observe that fuel pressure is at WOT spec while fuel pumps run.
 - 12.6 Inspect for fuel leaks.
 - 12.7 Ensure the bleed hose on fuel pressure gauge is still in an approved container.
 - 12.8 Open the valve on the fuel pressure gauge to bleed the system pressure.
 - 12.9 Once the system pressure is completely relieved, disconnect the fuel pressure gauge from the fuel pressure valve.
 - 12.10 Drain any fuel remaining in the gauge into an approved container.
 - 12.11 Remove the bleed hose on the fuel pressure gauge from the approved container.

12.12 Remove the shop towel from around the fitting and discard into an approved container.

12.13 Install the fuel rail pressure fitting cap.

12.14 Start and run the engine, verify there are no fuel leaks.

12.15 Shut Off the engine.



13. Install the intake hood.

14. Close the hatch.

CLAIM INFORMATION

Submit a Warranty FASTFAX per boat. Be sure to provide both engine serial numbers for multi-engine applications. Repair time allocation is per engine.



FASTFAX WARRANTY CLAIM APPLICATION

1-800-321-3797

International: 1-803-345-0336

ENGINE SERIAL #:
CRUSADER CLAIM #:

ENG. SERIAL #: _____ ENG. HRS.: _____

ENG. MODEL #: _____

TRANS. SERIAL #: _____

TRANS. MODEL #: _____

DATE OF SALE: ___/___/___ DATE OF FAILURE: ___/___/___

BOAT HULL TYPE: _____

BOAT HULL SERIAL #: _____

CRUSADER DEALER # _____ DATE: ___/___/___

DEALER NAME: _____ TECH OR CONTACT: _____

ADDRESS: _____

PHONE #: _____ FAX #: _____

OWNER NAME: _____ PHONE #: _____

ADDRESS: _____

SYMPTOM AND DESCRIPTION OF PROBLEM: Replace fuel damper clip: sn Engine #1 -6xxxxx sn Engine #2 - 6xxxxx

USCG RECALL #060083T

IMPORTANT: THE ENGINE, DEALER, OWNER, AND SYMPTOM INFORMATION REQUESTED ABOVE, MUST BE COMPLETELY FILLED IN AND THIS FORM SIGNED OR WARRANTY CLAIM MAY BE DENIED.

QTY.	PART #	DESCRIPTION	COST	QTY.	PART#	DESCRIPTION	COST

LABOR OP. #	TIME ALLOW.	LABOR EXT.	FAIL CODE	LABOR OPERATION DESCRIPTION
F021	0.5			R&R Fuel Damper Clip - Engine #1
F021	0.5			R&R Fuel Damper Clip - Engine #2

NOTE TO DEALER: A COPY OF THIS CLAIM MUST BE RETURNED WITH DEFECTIVE PART(S) IN 30 DAYS OR CLAIM WILL BE DENIED. RETURN PARTS TO: 1737 US HWY 76, LITTLE MOUNTAIN, SC 29075. CLAIM MUST BE SIGNED BY DEALER REPRESENTATIVE STATING THAT THE DEALER HAS THE SKILLS AND KNOWLEDGE NECESSARY TO PERFORM THE REPAIRS IN A SAFE AND SATISFACTORY MANNER, THAT THE DEALER HAS THE OWNERS CONSENT TO REPAIR, AND THAT THE DEALER AGREES TO PERFORM THE REPAIRS PER CRUSADER'S, THEN CURRENT, WARRANTY POLICIES AND PROCEDURES MANUAL. MAXIMUM RATE PAID TO DEALERS WHO DO NOT MEET REQUIREMENTS FOR 100% REIMBURSEMENT WILL BE PAID 75% OF POSTED RETAIL LABOR RATE.

	PARTS:
	STOCK PARTS ADD 10%:
	LABOR:
	MISC.:
	RETURN FREIGHT:
	CLAIM TOTAL:

APPROVED AT THE ABOVE LABOR TIME.
ADDITIONAL LABOR AND/OR EXPENSES ARE THE DEALER/OWNER'S RESPONSIBILITY!

DEALER'S SIGNATURE (REQUIRED)

APPROVED DENIED PARTS RETURN REQUIRED: YES NO

PARTS SUPPLIED BY: DEALER [] DISTRIBUTOR [] MANUFACTURER [] AUTH. LABOR RATE: _____ PREMIER DEALER: YES NO

SOLD TO: CUST. # _____ SHIP TO: CUST. # _____ SHIPPING INSTRUCTIONS: GRD [] NDA [] 2 DAY SELECT [] 3 DAY [] COD [] OTHER []

TERMS: _____ DISCOUNT: _____ CRUSADER ORDER # _____



FASTFAX WARRANTY CLAIM APPLICATION

1-800-321-3797

International: 1-803-345-0336

ENGINE SERIAL #: _____
PCM CLAIM #: _____

PCM DEALER # _____ DATE: ____/____/____
DEALER NAME: _____ TECH OR CONTACT: _____
ADDRESS: _____
PHONE #: _____ FAX #: _____
OWNER NAME: _____ PHONE #: _____
ADDRESS: _____

ENG. SERIAL #: _____ ENG. HRS.: _____
ENG. MODEL #: _____
TRANS. SERIAL #: _____
TRANS. MODEL #: _____
DATE OF SALE: ____/____/____ DATE OF FAILURE: ____/____/____
BOAT HULL TYPE: _____
BOAT HULL SERIAL #: _____

SYMPTOM AND DESCRIPTION OF PROBLEM: Replace fuel damper clip: sn Engine #1 -45xxxx

USCG RECALL #060083T

IMPORTANT: THE ENGINE, DEALER, OWNER, AND SYMPTOM INFORMATION REQUESTED ABOVE, MUST BE COMPLETELY FILLED IN AND THIS FORM SIGNED OR WARRANTY CLAIM MAY BE DENIED.

QTY.	PART #	DESCRIPTION	COST	QTY.	PART#	DESCRIPTION	COST

LABOR OP. #	TIME ALLOW.	LABOR EXT.	FAIL CODE	LABOR OPERATION DESCRIPTION
F021	0.5			R&R Fuel Damper Clip - Engine #1

NOTE TO DEALER: A COPY OF THIS CLAIM MUST BE RETURNED WITH DEFECTIVE PART(S) IN 30 DAYS OR CLAIM WILL BE DENIED. RETURN PARTS TO: 1737 US HWY 76, LITTLE MOUNTAIN, SC 29075. CLAIM MUST BE SIGNED BY DEALER REPRESENTATIVE STATING THAT THE DEALER HAS THE SKILLS AND KNOWLEDGE NECESSARY TO PERFORM THE REPAIRS IN A SAFE AND SATISFACTORY MANNER, THAT THE DEALER HAS THE OWNERS CONSENT TO REPAIR, AND THAT THE DEALER AGREES TO PERFORM THE REPAIRS PER PCM'S, THEN CURRENT, WARRANTY POLICIES AND PROCEDURES MANUAL. MAXIMUM RATE PAID TO DEALERS WHO DO NOT MEET REQUIREMENTS FOR 100% REIMBURSEMENT WILL BE PAID 50% OF POSTED RETAIL LABOR RATE, NOT TO EXCEED \$40.00 PER HOUR.

PARTS:	
STOCK PARTS ADD 10%:	
LABOR:	
MISC.:	
RETURN FREIGHT:	
CLAIM TOTAL:	

APPROVED AT THE ABOVE LABOR TIME.
ADDITIONAL LABOR AND/OR EXPENSES ARE THE
DEALER/OWNER'S RESPONSIBILITY!

DEALER'S SIGNATURE (REQUIRED) _____
APPROVED **DENIED** **PARTS RETURN REQUIRED: YES** **NO**

PARTS SUPPLIED BY: DEALER DISTRIBUTOR MANUFACTURER AUTH. LABOR RATE: _____ PREMIER DEALER: YES NO
SOLD TO: CUST. # _____ SHIP TO: CUST. # _____ SHIPPING INSTRUCTIONS: GRD NDA 2 DAY SELECT 3 DAY COD OTHER
TERMS: _____ DISCOUNT: _____ PCM ORDER # _____