

# Carriage

07V-424  
(12 pages)

P.O. BOX 246 MILLERSBURG, IN 46543 PHONE: 574\*642\*3622 FAX: 574\*642\*4145 WWW.CARRIAGEINC.COM

Mr. Daniel C. Smith  
Associate Administrator for Enforcement  
National Highway Traffic Safety Administration  
400 Seventh Street SW  
Washington, D.C. 20590



Re: Defect Information Report; Vehicles Equipped with  
Certain Refrigerators Manufactured by Dometic Corporation

Dear Mr. Smith,

Carriage has been advised by Dometic Corporation that certain Dometic refrigerators installed as original equipment in some of Carriage's recreational vehicles may contain a defect that relates to motor vehicle safety because they may experience a leak of pressurized coolant solution which can result in a vehicle fire under certain specific circumstances. On the basis of that Dometic determination, Carriage has decided that there may be a potential safety defect in its vehicles equipped with the identified refrigerators, and we are therefore submitting the enclosed Defect Information Report pursuant to 49 CFR Part 573.

Please contact me if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads 'Mark E. Colglazier'.

Mark E. Colglazier  
Chief Operating Officer  
Carriage, Inc.  
574-642-3622 Ext 612

Enclosure

# Carriage

P.O. BOX 246 MILLERSBURG, IN 46543 PHONE: 574\*642\*3622 FAX: 574\*642\*4145 WWW.CARRIAGEINC.COM

August 30, 2007

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Daniel C. Smith  
Associate Administrator for Enforcement  
National Highway Traffic Safety Administration  
400 Seventh Street SW  
Washington, DC 20590

Dear Mr. Smith:

Pursuant to 49 CFR Part 573, Carriage (“Carriage” or the “Company”) is submitting this report to NHTSA concerning a recall campaign, which is being voluntarily initiated. Specific information is as follows:

#### Identification of Vehicles in Campaign

The vehicles covered by this Report are recreational vehicles that were equipped with certain models of refrigerators manufactured by Dometic Corporation between April 1997 and May 2003.

Carri-Lite	1999 – 2002
Carriage	1998 – 2003
Carriage LS	1998 – 2002
Royals	1998 – 2001

The recall population was determined from the manufacturing records for the Company’s manufacturing plants in Millersburg, Indiana that produced the affected fifth wheel trailers. More specifically, the scope has been derived by identification of units equipped with the specific models of refrigerators that were offered during the stated model years.

#### Campaign Population

The total number of vehicles covered by this Report is 88 (eighty-eight).

#### Defect Estimate

Based on information received from Dometic, Carriage believes that approximately 100 percent of these vehicles actually contain the defect.

Description of Defect

Under some circumstances, a fatigue crack can develop in the boiler tube of the covered refrigerators, which can permit the release of pressurized coolant solution. If this solution is exposed to an ignition source under certain specific circumstances, it can result in a vehicle fire.

Chronology of Events

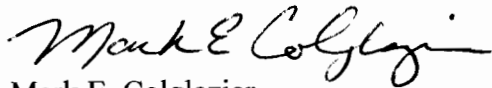
Dometic advised Carriage of its defect determination by letter dated February 13, 2007. Carriage is not aware of any fires in its vehicles that appear to be related to this defect. Nevertheless, after reviewing the matter, Carriage decided to submit this defect report.

Remedy Program

Dometic has arranged to conduct a recall to remedy the potential defect in Carriage vehicles at no charge to vehicle owners. See Recall No. 06E-076. Pursuant to 49 CFR 573.6(c)(8)(i) and 573.13, owners will be advised that Dometic will reimburse them if they have incurred costs to obtain a remedy for a refrigerator containing such a defect prior to their receipt of the notification.

Thank you for your assistance.

Sincerely,



Mark E. Colglazier  
Carriage Incorporated

**CARRIAGE, INC.**

Date: 8/30/2007

**DOMETIC SAFETY RECALL CAMPAIGN  
VIN NUMBER LISTING OF AFFECTED UNITS**

<b>PRODUCT LINE</b>	<b>SERIAL #</b>	<b>VIN #</b>	<b>MODEL</b>	<b>MODEL YEAR</b>
CARRI-LITE	B13971	16F62C3NXX1013971	529RK	1999
CARRI-LITE	B13985	16F62C4PXX1013985	730RK	1999
CARRI-LITE	B13989	16F62C4R5X1013989	734RL3	1999
CARRI-LITE	B14016	16F62C5R4X1014016	736RL3	1999
CARRI-LITE	B14018	16F62C5R8X1014018	736RK3	1999
CARRI-LITE	B14086	16F62C4R1X1014086	732RK	1999
CARRI-LITE	B14123	16F62C4R3X1014123	732RK	1999
CARRI-LITE	B14128	16F62C3P2X1014128	530RK2	1999
CARRI-LITE	B14196	16F62C4R6X1014196	732RK3	1999
CARRI-LITE	B14386	16F62C4R2X1014386	732RK3	1999
CARRI-LITE	B14388	16F62C4R6X1014388	732RK	1999
CARRI-LITE	B14505	16F62C4R4Y1014505	732RK3	2000
CARRI-LITE	B14544	16F62C5R5Y1014544	736RL3	2000
CARRI-LITE	B14629	16F62C5R2Y1014629	736RL3	2000
CARRI-LITE	B14757	16F62C4P0Y1014757	730RK	2000
CARRI-LITE	B15022	16F62C5R511015022	736KS3	2001
CARRI-LITE	B15042	16F62C4R911015042	734RIK3	2001
CARRI-LITE	B15049	16F62C5R311015049	736RL3	2001
CARRI-LITE	B15066	16F62C5R611B15066	736KS3	2001
CARRI-LITE	B15115	16F62C5R221B15115	736KS3	2002
CARRI-LITE	B15132	16F62C4R021B15132	734SK3	2002
CARRI-LITE	B15152	16F62C5R821B15152	CL36KS3	2002
CARRI-LITE	B15200	16F62C5R421B15200	CL36KS3	2002
CARRIAGE	D10904	16F63B6R7W1010904	CW3742	1998
CARRIAGE	D10909	16F63B6R6W1010909	CW3742	1998
CARRIAGE	D10934	16F63B6R3X1010934	CW3804	1999
CARRIAGE	D10941	16F63B6R0X1010941	CW3742	1999
CARRIAGE	D11006	16F63B6R0X1011006	CW3804	1999
CARRIAGE	D11010	16F63B6R2X1011010	CW4008	1999
CARRIAGE	D11016	16F63B6R3X1011016	CW3742	1999
CARRIAGE	D11043	16F63B6R6X1011043	CW3742	1999
CARRIAGE	D11050	16F63B6R3X1011050	CW3844	1999
CARRIAGE	D11051	16F63B6R5X1011051	CW4042	1999
CARRIAGE	D11091	16F63B6R6X1011091	CW4008	1999
CARRIAGE	D11097	16F63B6R7X1011097	CW3804	1999
CARRIAGE	D11121	16F63B6R0X1011121	CW4008	1999
CARRIAGE	D11124	16F63B6R6X1011124	CW3804	1999
CARRIAGE	D11131	16F63B6R3X1011131	CW4008	1999
CARRIAGE	D11137	16F63B6R4X1011137	CW3804	1999
CARRIAGE	D11157	16F63B6R8Y1011157	CW3804	2000
CARRIAGE	D11168	16F63B6R2Y1011168	CW3804	2000
CARRIAGE	D11177	16F63B6R3Y1011177	CW3804	2000
CARRIAGE	D11368	16F63B6R211011368	CW3742	2001
CARRIAGE	D11371	16F63B6R211011371	CW3708	2001
CARRIAGE	D11633	16F62B5R231D11633	CW362	2003

**CARRIAGE, INC.**

Date: 8/30/2007

**DOMETIC SAFETY RECALL CAMPAIGN  
VIN NUMBER LISTING OF AFFECTED UNITS**

<b>PRODUCT LINE</b>	<b>SERIAL #</b>	<b>VIN #</b>	<b>MODEL</b>	<b>MODEL YEAR</b>
CARRIAGE LS	C10918	16F63B6R7W1010918	LS403	1998
CARRIAGE LS	C10930	16F62B4R9X1010930	LS364	1999
CARRIAGE LS	C10962	16F62B4R0X1010962	LS363	1999
CARRIAGE LS	C10981	16F62B4R4X1010981	LS341	1999
CARRIAGE LS	C10994	16F62B4R2X1010994	LS364	1999
CARRIAGE LS	C10997	16F62B4R8X1010997	LS364	1999
CARRIAGE LS	C11005	16F62B4R1X1011005	LS365	1999
CARRIAGE LS	C11039	16F62B4R7X1011039	LS364	1999
CARRIAGE LS	C11044	16F62B4R0X1011044	LS321	1999
CARRIAGE LS	C11045	16F62B4R2X1011045	LS364	1999
CARRIAGE LS	C11048	16F62B4R8X1011048	LS364	1999
CARRIAGE LS	C11049	16F62B4RXX1011049	LS364	1999
CARRIAGE LS	C11067	16F62B4R1X1011067	LS364	1999
CARRIAGE LS	C11084	16F62B4R1X1011084	LS342	1999
CARRIAGE LS	C11087	16F62B4R7X1011087	LS362	1999
CARRIAGE LS	C11093	16F62B4R2X1011093	LS362	1999
CARRIAGE LS	C11111	16F62B4R0X1011111	LS362	1999
CARRIAGE LS	C11112	16F62B4R2X1011112	LS364	1999
CARRIAGE LS	C11123	16F62B4R7X1011123	LS364	1999
CARRIAGE LS	C11125	16F62B4R0X1011125	LS344	1999
CARRIAGE LS	C11139	16F62B4R0X1011139	LS364	1999
CARRIAGE LS	C11172	16F62B5R9Y1011172	LS362	2000
CARRIAGE LS	C11188	16F62B5R2Y1011188	LS367	2000
CARRIAGE LS	C11225	16F62B5R4Y1011225	LS366	2000
CARRIAGE LS	C11234	16F62B5R5Y1011234	LS362	2000
CARRIAGE LS	C11237	16F62B5R0Y1011237	LS367	2000
CARRIAGE LS	C11283	16F62B5R7Y1011283	LS366	2000
CARRIAGE LS	C11308	16F62B4R6Y1011308	LS342	2000
CARRIAGE LS	C11323	16F62B5R4Y1011323	LS366	2000
CARRIAGE LS	C11343	16F62B5RXY1011343	LS362	2000
CARRIAGE LS	C11354	16F62B4R511011354	LS342	2001
CARRIAGE LS	C11362	16F62B5R611011362	LS364	2001
CARRIAGE LS	C11385	16F62B5R711011385	LS364	2001
CARRIAGE LS	C11392	16F62B4RXY1011392	LS341	2000
CARRIAGE LS	C11405	16F62B5R911011405	LS361	2001
CARRIAGE LS	C11415	16F62B5R111011415	LS362	2001
CARRIAGE LS	C11460	16F62B5R611011460	LS366	2001
CARRIAGE LS	C11487	16F62B5R121C11487	LS366	2002
CARRIAGE LS	C11489	16F62B5R521C11489	LS364	2002
ROYALS	E08529	19F63A6R4W1008529	RW3841	1998
ROYALS	E08533	19F63A6R4X1008533	RW3843	1999
ROYALS	E08540	19F63A6R1X1008540	RW3843	1999
ROYALS	E08586	19F63A6R411008586	RW3841	2001

## POTENTIAL DEFECT NOTIFICATION

Dometic Corporation ("Dometic"), a supplier of original equipment for the manufacturers of recreation vehicles has determined during the week of August 18, 2006 that a potential defect may exist in the items of motor vehicle equipment listed below. Dometic is submitting this notification of a potential defect to the National Transportation Safety Administration in accordance with the applicable provisions of 49 CFR Part 573.

Dometic Corporation is a Delaware corporation with its principal place of business at 2320 Industrial Parkway, Elkhart, Indiana 46515. The Dometic products affected by this notice were manufactured by Dometic AB, a Swedish company. The registered agent for Dometic Corporation and Dometic AB is Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington, Delaware 19808.

The affected Dometic products which may contain the potential defect are two-door refrigerators manufactured between April 1997 and May of 2003. The potentially affected refrigerators have the model designations set forth below:

NDR1062  
RM2652  
RM2662  
RM2663  
RM2852  
RM2862  
RM3662  
RM3663  
RM3862  
RM3863

The possibly affected units will have serial numbers beginning with the following digit combinations:

713xxxxx through 752xxxxx  
801xxxxx through 852xxxxx  
901xxxxx through 952xxxxx  
001xxxxx through 052xxxxx  
101xxxxx through 152xxxxx  
201xxxxx through 252xxxxx  
301xxxxx through 319xxxxx.

The potential defect is associated with cooling unit at the back of the refrigeration cabinet.

A fractional percentage of the potentially affected refrigerators have experienced a fatigue crack that may develop in the boiler tube in the area of the weld between the boiler tube and the heater pocket. A fatigue crack may release a sufficient amount of pressurized coolant solution into an area where an ignition source (gas flame) is present. Dometic's investigation has shown that a simulated release of cooling solution (refrigerant) in the area of the boiler, under certain conditions, could be ignited by the presence of an open flame. A boiler fatigue crack with the loss of cooling solution without ignition would result in a non-operational refrigerator that is not a safety issue. Under certain conditions, the released coolant could ignite and result in a fire. In order to have a fire, at a minimum, all of the following conditions must exist:

1. The refrigerator must be on and normally operating and gas burner must be lit;
2. There must be an oversized heating element in the refrigerator;
3. The boiler tube must develop a throughway fatigue crack of a specific size;
4. There must be a release of the cooling solution at a rate which will allow the accumulation of the cooling solution at a concentration within its range of flammability; and

5. There must be ignition source (gas flame) present.

If any of these conditions are not present, a release of the cooling solution will not result in a fire.

In April of 1997 Dometic modified the design of the affected refrigerators by increasing the wattage of the heating element from 325 watts to 354 watts. All production of the affected units from April 1997 through May of 2003 utilized the 354 watt heating element. In May of 2003, in order to improve the operating life of the refrigerators, Dometic returned to the use of the 325 watt heating element which it continues to use today. It is now believed that the use of the higher wattage heater contributed to abnormal fatigue in the boiler tube.

The products in question are all refrigerators used in the original manufacture of recreation vehicles or as replacement equipment for recreation vehicles. The total population of refrigerators potentially containing the defect is 926,877. Dometic estimates a potential maximum incident rate of 0.01% related to boiler fatigue cracks that leak and may result in a fire. There have been no incidents of injury or death related to the affected population of Dometic refrigerators.

Dometic became aware of the occurrence of fires which may have involved their products and retained an independent engineering testing laboratory to fully evaluate and investigate any potential defect in their refrigerators which might result in a fire. A number of returned units were analyzed and microscopic fatigue cracks which could release coolant into the area of the burner were identified in the boiler tube metal in the area of the weld between the heater pocket and boiler tube. Tests simulating the cracks were conducted the week of August 18, 2006 and confirmed a possible cause of fire in

the refrigerators under certain conditions. These test results prompted the preparation of this notice.

Dometic continues to gather information on the potential defect and will forward additional relevant information as it becomes available.

Dometic has not yet identified a proposed remedy for the potential defect. Dometic will continue a testing program designed to identify and evaluate possible remedies. This evaluation will take place both in the United States and in Sweden. Once a remedy has been identified, Dometic will initiate or participate in a remedy campaign initiated by the original equipment manufacturers and aftermarket suppliers who have purchased, sold, and distributed these products. A list of original equipment manufacturers and aftermarket suppliers to whom Dometic has sold the potentially defective refrigerators is being prepared and will be provided to the NHTSA upon its completion.

This notice was prepared by and inquiries should be sent to:

Mr. Patrick N. McConnell, Director  
Engineering, Product Safety and Standards  
Dometic Corporation  
509 South Poplar Street  
LaGrange, IN 46761  
Phone: 260/463-2191  
Fax: 260/463-4179

DATED this 28<sup>th</sup> day of August, 2006

Dometic Corporation

By:   
Patrick N. McConnell, Director  
Engineering, Product Safety and Standards

EI.DS01 RWP 198227x2



Dear Valued Customer:

**IMPORTANT RECALL INFORMATION  
PLEASE RESPOND IMMEDIATELY  
RECALL CAMPAIGN NO. 06E-076**

I am writing to inform you of a recall campaign with respect to a potential safety-related defect in certain two-door refrigerator units manufactured by Dometic Corporation (“Dometic”) between April 1997 and May 2003 and to advise you of what Dometic will do and what you should do with respect to this recall.

Dometic has created a program that minimizes the strain on your organization’s resources and personnel, minimizes your administrative costs, and creates a closed-loop data flow. We have retained recall expert Stericycle Incorporated (“Stericycle”) to conduct this campaign on behalf of original equipment manufacturers that used the affected refrigerators, all at Dometic’s cost. Information regarding Stericycle is enclosed with this letter (Enclosure No. 1). Information regarding this election is set forth below.

***Covered Products:***

The following is a list of the specific model numbers of the refrigerators covered by this recall. Our records indicate that some of those refrigerators may have been installed as original equipment in recreational vehicles manufactured and sold by your company. See the serial number/valve instruction sheet for information on location of serial numbers (Enclosure No. 2). **Please note that none of the refrigerators manufactured after May 2003 contain this defect.**

The refrigerators being recalled have one of the following model numbers as well as one of the following serial numbers:

**Model Numbers:**

NDR1062, RM2652, RM2662, RM2663, RM2852, RM2862,  
RM3662, RM3663, RM3862, RM3863

**Serial Numbers:**

713xxxxx through 752xxxxx  
801xxxxx through 852xxxxx  
901xxxxx through 952xxxxx  
001xxxxx through 052xxxxx  
101xxxxx through 152xxxxx  
201xxxxx through 252xxxxx  
301xxxxx through 319xxxxx

***Problem Description:***

After some period of use, a fatigue crack may develop in the boiler tube of the covered refrigerators that may release a sufficient amount of pressurized coolant solution into an area where an ignition source may be present. If this were to occur under certain conditions, the coolant could ignite and result in a fire. On the basis of these facts, Dometic has determined that the refrigerators may contain a defect that relates to motor vehicle safety. We have notified the National Highway Traffic Safety Administration (NHTSA) of this determination, and we will be conducting a recall of the covered items pursuant to Campaign No. 06E-076. A copy of Dometic's report to NHTSA is enclosed (Enclosure No. 3).

***What We Will Do:***

Dometic will offer to provide owners of all covered refrigerators a rework for the potential defect at no charge for parts or labor. We have developed a rework, and the necessary parts should be available on April 16, 2007. The rework consists of a secondary burner housing, a thermal fuse and a melt fuse. Information regarding data collection and payment for the rework is included with this letter (Enclosure No. 4). However, as explained below, we will need your assistance in identifying the current owners of the vehicles in question.

***What You Need to Do:***

First, in the unlikely event that you have any new vehicles equipped with the covered refrigerators in your inventory, you should not sell them until you have implemented the rework.

**Pursuant to NHTSA regulations, 49 CFR 573.3(f), within five days of your receipt of this letter, you must submit a Defect Information Report to NHTSA covering all of the vehicles that you manufactured with one of the covered refrigerators as original equipment. This duty applies even though Dometic has already submitted its own Defect Information Report. For your convenience, we have enclosed a sample version of the required report and cover letter (Enclosure No. 5).** If any of your vehicles with these refrigerators were sold in Canada, you should also submit a similar report to Transport Canada.

As the manufacturer of vehicles equipped with the potentially defective refrigerators, **you are also required to notify owners and purchasers of the affected refrigerators of the defect and to assure that they are provided with the opportunity to receive a free rework.** However, Dometic recognizes that product recalls can put a strain on an organization's resources and personnel, and that your company may not have much, or any, experience in conducting vehicle recalls. Therefore, as authorized by NHTSA Regulations, Dometic is offering – at no charge – to manage the administration of the forthcoming recall as it applies to the vehicles manufactured by each of our OEM customers. We recommend that you authorize Dometic to conduct the recall of your vehicles – including, but not limited to, the notification of vehicle owners, the implementation of the rework program, the maintenance of relevant records, and the reporting to NHTSA of the progress of the recall – by checking the appropriate box on the Election Form (Enclosure No. 6) enclosed with this letter and returning it to Stericycle, the firm that Dometic has employed to help it conduct this recall, no later than **ten (10) days after receipt of letter.** By authorizing Dometic/Stericycle to conduct the recall, you will not only not have to pay for what will be a large campaign, but you will also ensure a smooth flow of data

collection integral to the effective completion of the recall. Additional information is included on the Election Form on how Stericycle and Dometic will take care of the recall campaign for you.

Whether you elect to have Dometic conduct the recall, or you intend to conduct it yourself, you will need to provide Stericycle with a list of the vehicle identification numbers (VIN) of all of your vehicles equipped with the covered Dometic refrigerators, as well as a list of the names and addresses of the purchasers of those vehicles, organized by VIN. This information will enable Dometic to assure notification of all affected owners. Please provide the vehicle information electronically as an Excel or text delimited file. If you are not certain whether a particular vehicle was equipped with one of the recalled refrigerators, please include it on your list, since we would rather be over-inclusive than under-inclusive. **We assure you that this list will be used only for the purposes of this recall.** Please provide the list to Stericycle as soon as possible, but in any event no later than **10 days after receipt of letter.** Even if you decide to conduct the recall yourself, please complete and return the Election Form to Stericycle, so we will know how you have decided to proceed.

Please note that regardless of which option you choose, you still are required to submit a Defect Information Report to NHTSA. If you have any questions about NHTSA requirements, you may contact Ms. Kelly Schuler of NHTSA's Recall Management Division at (202) 366-5227 or by e-mail at [kelly.schuler@dot.gov](mailto:kelly.schuler@dot.gov).

If you have any other questions about this recall, please contact Brad Sargent at Dometic by telephone at (574) 294-2511, or by e-mail at [brad.sargent@dometicusa.com](mailto:brad.sargent@dometicusa.com).

We regret the inconvenience and effort that this recall will cause you. However, the safety of the users of our products is of paramount importance.

Very truly yours,

Patrick N. McConnell  
 Director of Engineering, Product Safety and Standards  
 Dometic Corporation

Enclosures:

- |                 |   |
|-----------------|---|
| Enclosure No. 1 | Stericycle Information  |
| Enclosure No. 2 | Serial Number/Valve Instruction                                   |
| Enclosure No. 3 | Copy of NHTSA Notification Letter                                 |
| Enclosure No. 4 | Information Regarding Data Collection and Payment for the Rework  |
| Enclosure No. 5 | Sample of OEM Defect Information Report to NHTSA and Cover Letter |
| Enclosure No. 6 | Recall Management Election Form                                   |