

Safety Defect and Noncompliance Report Guide for Vehicles  
**PART 573 Defect and Noncompliance Report<sup>1</sup>**

07V-451  
(9 pages)

On 8/18, ~~199~~<sup>2006</sup>, Dometic [MFR] decided that (a defect which relates to motor vehicle safety)(a noncompliance with Federal Motor Vehicle Safety Standard No. \_\_\_\_\_) exists in the motor vehicles listed below, and is furnishing notification to the National Highway Traffic Safety Administration in accordance with 49 CFR Part 573 **Defect and Noncompliance Reports**.

Date this report was prepared: 9/20/2007

Furnish the manufacturer's identification code for this recall (if applicable): \_\_\_\_\_

1. Identify the full corporate name of the fabricating manufacturer of the vehicle being recalled. If the recalled vehicle is imported, provide the name and mailing address of the designated agent as prescribed by 49 U.S.C. §30164.

Rolling Thunder Conversions  
47901 E 72nd Ave  
Bennett CO 80102

Identify the corporate official, by name and title, whom the agency should contact with respect to this recall.

Cheryl Kennedy - Rolling Thunder Conversions  
~~DA~~ Nicole Gasvoda - Dometic

Telephone Number: 317-275-7516 Fax No.: \_\_\_\_\_

Name and Title of Person who prepared this report:  
Cheryl Kennedy

Signed: Cheryl Kennedy

<sup>1</sup>Each manufacturer must furnish a report, to the Associate Administrator for Safety Assurance, for each defect or noncompliance condition which relates to motor vehicle safety.

**I. Identify the Vehicle Models Involved in the Recall**

2. Identify the Vehicles Involved in the Recall, for each make and model or applicable vehicle line (provide illustrations or photographs as necessary to describe the vehicle), provide:

Make(s): Elite Model Years Involved: 03 Model(s): 4 horse trailer

Production Dates: Beginning: 6/1/03 Ending: 7/21/03

VIN Range: Beginning: #5 Ending: same

Vehicle Type: trailer Bodystyle: 4 horse trailer

Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall:

#5

Make(s): Elite Model Years Involved: 2004 Model(s): 4 horse trailer

Production Dates: Beginning: \_\_\_\_\_ Ending: \_\_\_\_\_

VIN Range: Beginning: 5MKW63124004624 Ending: same

Vehicle Type: trailer Bodystyle: 4 horse trailer

Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall:

#3

Make(s): \_\_\_\_\_ Model Years Involved: \_\_\_\_\_ Model(s): \_\_\_\_\_

Production Dates: Beginning: \_\_\_\_\_ Ending: \_\_\_\_\_

VIN Range: Beginning: \_\_\_\_\_ Ending: \_\_\_\_\_

Vehicle Type: \_\_\_\_\_ Bodystyle: \_\_\_\_\_

Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall:

Identify the approximate percentage of the production of all the recalled models manufactured by your company between the inclusive dates of manufacture provided above, that the recalled model population represents. For example, if the recall involved Widgets equipped with certain items of equipment from January 1, 1996 through April 1, 1997, then what was the percentage of the recalled Widgets of all Widgets manufactured during that time period.

**II. Identify the Recall Population**

3. Furnish the total number of vehicles recalled potentially containing the defect or noncompliance.

Model	Year	Number of Vehicles Potentially Involved
Horse Trailers	2003-2004	2

Total Number Potentially Affected by the Recall: 2

4. Furnish the approximate percentage of the total number of vehicles estimated to actually contain the defect or noncompliance: 2 out of 6 between 4/97 and 5/03  
33%.

Identify and describe how the recall population was determined--in particular how the recalled models were selected and the basis for the beginning and final dates of manufacture of the recalled vehicles:

Dometic provided the 4 ~~to~~ refrigerators  
sold to Rolling Thunder Conversions. 2 of the  
4 were returned as defective. The other  
2 were tracked to the trailers that they  
were installed in.

III. Describe the Defect or Noncompliance

5. Describe the defect or noncompliance. The description should address the nature and physical location of the defect or noncompliance. Illustrations should be provided as appropriate.

The potential defect is in the Dometic refrigerator. They get microscopic fatigue cracks which could release coolant into the area of the burner and could cause a fire. The 2 refrigerators are installed in living quarters of horse trailers.

Describe the cause(s) of the defect or noncompliance condition.

Microscopic fatigue cracks.

Describe the consequence(s) of the defect or noncompliance condition.

could cause a fire

Identify any warning which can (a) precede or (b) occur.

unknown

If the defect or noncompliance is in a component or assembly purchased from a supplier, identify the supplier by corporate name and address.

Dometic Corporation  
2320 Industrial Parkway  
Elkhart IN 46515

Identify the name and title of the chief executive officer or knowledgeable representative of the supplier:

Nicole Gasvoda

**IV. Provide the Chronology in Determining the Defect/Noncompliance**

*If the recall is for a defect, complete item 6, otherwise item 7.*

6. With respect to a defect, furnish a chronological summary (including dates) of all the principle events that were the basis for the determination of the defect. The summary should include, but not be limited to, the number of reports, accidents, injuries, fatalities, and warranty claims. *(See attached)*

7. With respect to a noncompliance, identify and provide the test results or other data (in chronological order and including dates) on which the noncompliance was determined.

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**V. Identify the Remedy**

8. Furnish a description of the manufacturer's remedy for the defect or noncompliance. Clearly describe the differences between the recall condition and the remedy.

*Working with Dometic for recall strategy and remedy. Nicole Gasvoda of Stericycle is handling the recall campaign. Received this recall information and strategy 9/19/07.*

Clearly describe the distinguishing characteristics of the remedy component/assembly versus the recalled component/assembly.

*TBD unknown at this time*

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## Question #4

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

## Question #6

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

## Question #6

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

Identify and describe how and when the recall condition was corrected in production. If the production remedy was identical to the recall remedy in the field, so state. If the product was discontinued, so state.

2 of the 4 refrigerators were returned to Dometic as defective.

The 2 remaining in the trailers - owners will be notified per the guidance of Stericycle.

#### VI. Identify the Recall Schedule

Furnish a schedule or agenda (with specific dates) for notification to other manufacturers, dealers/retailers, and purchasers. Please, identify any foreseeable problems with implementing the recall.

TBD based on Stericycle. Received Stericycle information from Dometic on 9/19/07. Will contact Stericycle for guidance by 9/21/07.

#### VII. Furnish Recall Communications

9. Furnish a final copy of all notices, bulletins, and other communications that relate directly to the defect or noncompliance and which are sent to more than one manufacturer, distributor, or purchaser. This includes all communications (including both original and follow-up) concerning this recall from the time your company determines the defect or noncompliance condition on, not just the initial notification. A DRAFT copy of the notification documents should be submitted to this office by Fax (202-366-7882) for review prior to mailing.

This should have already been provided by Dometic through Stericycle.

Note that these documents are to be submitted separately from those provided in accordance with Part 573.8 requirements.