



INTERNATIONAL LTD
THERMAL RESEARCH

03E-018 (1/12)

#6 - 2351 Simpson Road, Richmond, BC, CANADA, V6X 2R2

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FACSIMILE TRANSMITTAL SHEET

IF YOU DO NOT RECEIVE ALL OF THE PAGES, PLEASE CALL 604-278-1272

DATE: MAR 14 103

PAGES TO FOLLOW: 13

TO:

CO: NH TSA

FAX: 202-366-7982

PHONE:

FROM: LES OHNO

RE:

Please find Form 573.

RECEIVED
 MAR 17 A 9 28
 COMMUNICATIONS

U.S. Address 207- 936 Peace Portal Drive, BLAINE, WA, 98230

03E-018 2/12

Form Approved: O.M.B. No. 2127-0004

Safety Defect and Noncompliance Report Guide for Equipment
PART 573 Defect and Noncompliance Report¹

On _____, 199____, _____ [MFR] decided that (a defect which relates to motor vehicle safety)(a noncompliance with Federal Motor Vehicle Safety Standard No. _____) exists in items of motor vehicle equipment 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: MARCH 14 03

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

1. Identify the full corporate name of the fabricating manufacturer/brand name/trademark owner of the recalled item of equipment. If the recalled item of equipment is imported, provide the name and mailing address of the designated agent as prescribed by 49 U.S.C. §30164.

IMPORTER: RIXEN'S ENTERPRISES INC, 2700 N. HAYDEN Isl. DR.
PORTLAND, OR, USA 97217

MANUFACTURER: INTERNATIONAL THERMAL RESEARCH LTD.

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

ED. ROBINSON, PRESIDENT

Telephone Number: 604-278-1272 Fax No.: 604-278-1274

Name and Title of Person who prepared this report.

LES OHNO

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

This guide was developed from 49 CFR Part 573, "Defect and Noncompliance Reports" and also outlines information currently requested. Any questions, please consult the complete Part 573 or contact Mr. Jon White at (202) 366-5226 or by FAX at (202) 366-7882.

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Signed: [Signature]

I. Identify the Recalled Items of Equipment

2. Identify the Items of Equipment Involved in this Recall, for each make and model or applicable item of equipment product line (provide illustrations or photographs as necessary to describe the item of equipment), provide:

Generic name of the item: HURRICANE HOT WATER HEATER
Make: _____ Model: MODEL CO 20/32/45/65/85/105/145XL
Part Number: _____ Size: _____
Function: HOT WATER HEATER
Other information which characterizes/distinguishes the items of equipment to be recalled:

Make: _____ Model: _____
Part Number: _____ Size: _____
Function: _____
Other information which characterizes/distinguishes the items of equipment to be recalled:

Make: _____ Model: _____
Part Number: _____ Size: _____
Function: _____
Model Years Involved: _____
Other information which characterizes/distinguishes the items of equipment to be recalled:

Make: _____ Model: _____
Part Number: _____ Size: _____
Function: _____

Other information which characterizes/distinguishes the items of equipment to be recalled:

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. Identifying the Recall Population

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

Model	Year	Number of Items Potentially Involved
ALL GO MODELS	2001	} 1055
	2002	
	2003	

Total Number Potentially Affected by the Recall: 1055

4. Furnish the approximate percentage of the total number of items of equipment estimated to actually contain the defect or noncompliance: Actual occurrence to date = 4 of 1055 = .0038

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 items of equipment:

Electronic control boards, V 2001 were shipped in the year 2001 to the present date.

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.

SEE ATTACHED SHEET

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

see attached sheet

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

see attached sheet

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

Steam or smoke issuing from heater bay compartment

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

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

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.

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.

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.

See attached sheet inclusion

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

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.

Production subsequent to the estimated solution date, March 21/03 will reflect the recall remedy, which is the solution described in Part V

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.

Upon NHTSA approval, all affected owners will immediately be contacted by mail, fax or e-mail.

If NHTSA approval is obtained for the attached notification documentation, affected owners will be contacted immediately.

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



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Fax: (604) 278-1274

03E-018 (8/12)

March 14, 2003

Attention: National Highway Traffic Safety Administration

Part III: Description of Defect

A safety concern has been identified regarding the Hurricane Heater Systems installed in various motor home coaches requiring immediate attention. The concern relates to a defective IC chip located on the circuit board of the heater control board that may be damaged by a transient voltage spike. The control board is a component that is installed within a heating system that burns diesel fuel to heat water for a hydronic heating system and potable water. If this IC chip fails, a condition may exist where the heating system will not shut down and heating will continue. After a time all the coolant (water & anti-freeze) turn to steam. Continued operation of the heating system may result in a fire, which can cause personal injury or property damage.

The concern relates to the potential failure of electronic components located in the electronic control board. This deficiency may result in the potential failure of the heater to detect an overheat situation causing the heater not to shut down.

Part IV: Chronology of Defect

- Jan 27, 2003: First field indication of overheating heater.
- Jan 27, 2003 to March 14, 2003: Eight heaters installed in motor homes have indications of overheating.
 - No accidents, injuries, or fatalities.
 - Five warranty claims for the eight occurrences.

Part V: Remedy

The solution requires the installation of an additional control circuit to the existing control system. This new circuit provides an additional mechanical safety overheat mechanism which operates independently of the heater controller.

In the event of condition where the high temperature set point has been reached, the contacts in the high limit sensor will open, causing a relay in the new circuit to shut off power to the fuel pump. This will cause the heater to flame out and stop. The heater cannot be restarted until a manual reset button has been activated. An indicator status light will go out if the overheat relay has been deactivated.

If the relays were to fail, they will fail in an open condition, which will not provide power to the fuel pump. There is a 5 A fuse inline with the power to the fuel pump. This is to keep the contacts of the relay from fusing if the fuel pump ever shorts.

This new control circuit will be connected by a electrical cable to the existing heater controller and located close proximity.

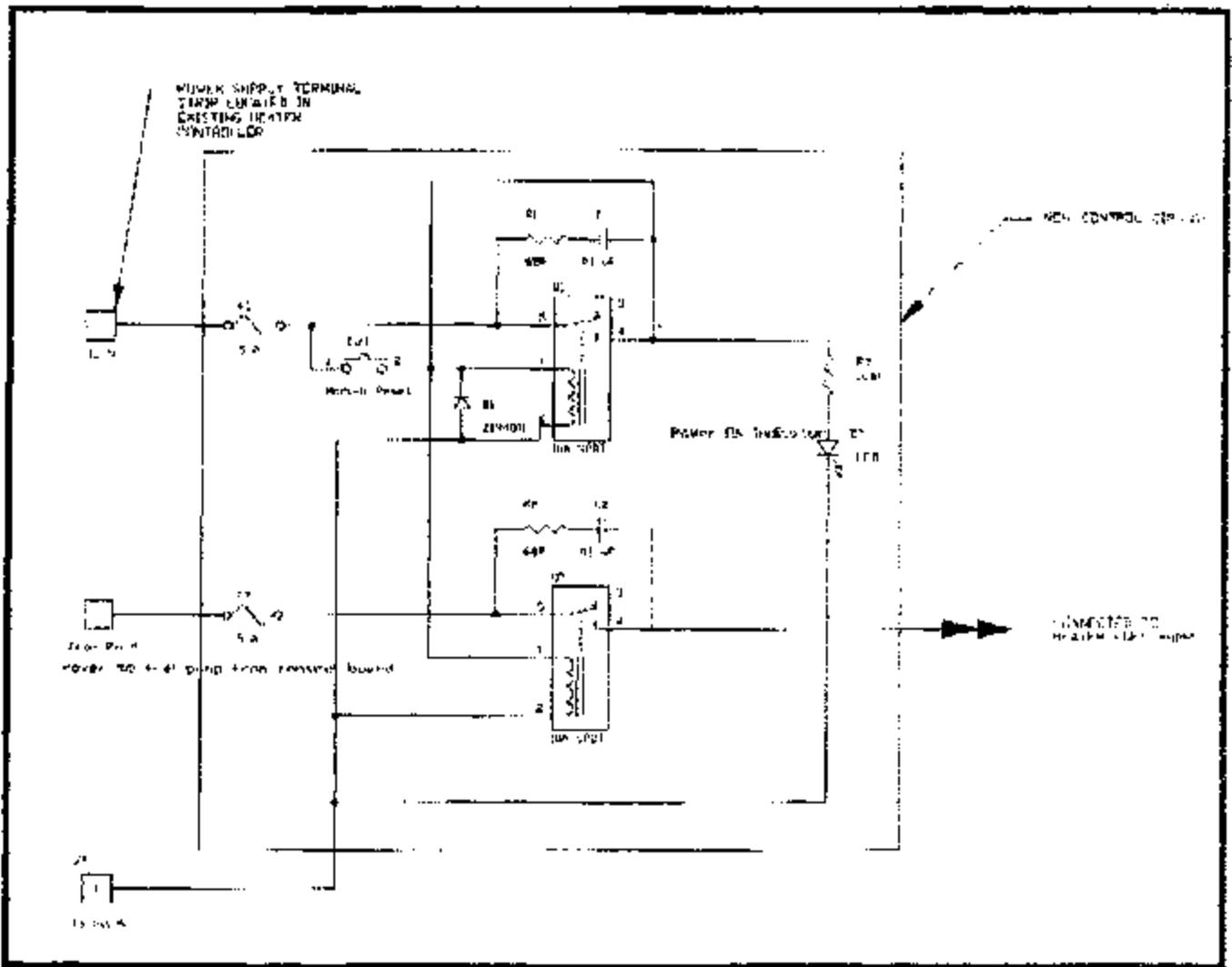


Figure 1: Additional Control Circuit Schematic

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#6 - 2351 Simpson Road, Richmond, BC, CANADA, V6X 2R2
E-Mail: itr@shaw.ca Tel: (604) 278-1272
Website: www.hurricaneheater.com Fax: (604) 278-1274

Unit owner

Attention:

Important Notice – Hurricane Heating System

International Thermal Research Ltd. is the manufacturer of the Hurricane Heating System. Our information is that you own a motor home/boat which contains one of our Systems.

This Notice is to inform you that we have discovered a potential electronic problem with our V2001 electronic control boards that can result in overheating and a potential fire situation.

To avoid any possibility of the System that you have overheating and potentially causing a fire please turn the System OFF. A master off-on switch is located on the side of the electronic control box which will be located adjacent to the Heater. Place it in the OFF position.

Please advise this office by telephone (1-800-755-1272), fax (604-278-1274) or e-mail (itr@shaw.ca) as quickly as you can. We will change the component which is occasionally causing the overheating problem. At the same time that our authorized representative visits you, as compensation for the inconvenience that this will cause you, some additional upgrading will be done on your System to implement some upgrades which have been developed since you bought your System.

Do not operate the System until an ITR authorized representative has examined your System and made modifications to eliminate the potential problems referred to.

Sincerely,

Edgar Robinson, President
INTERNATIONAL THERMAL RESEARCH LTD.

Address 207-936 Peace Portal Drive, BLAINE, WA, 98230

Subject to NHTSA approval



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E-Mail: itr@shaw.ca

Tel: (604) 278-1272

Website: www.ithurricane.com

Fax: (604) 278-1274

03E-018 ^{12/12}

XYZ Dealer

Attention:

Important Notice - Hurricane Heating System

This is sent to you as we have received advice that you are selling Motor Homes that contain Hurricane Heating Systems. This is to inform you of a potential electronic problem with our V-2001 electronic control board that may adversely affect safety features in some of the Systems protecting against overheating and a potential fire situation.

Please immediately advise this office by telephone (1-800-755-1272), fax (604-278-1274) or e-mail (itr@shaw.ca) as quickly as you can if you have in your inventory, or have undelivered units still in your possession. If you do, ITR will send a factory authorized representative immediately to examine all of the Systems in your inventory. ITR will promptly, solely at its cost, upgrade all of the Systems which you presently have with replacement of the components that we believe are creating the potential problems. As further compensation for the inconvenience to you, we will, in servicing the units you still have, effect some other upgrades that have been developed - at no cost to you.

Do not operate any Hurricane Heating Systems until an ITR authorized representative has examined the Systems currently in your possession and made modifications to eliminate the potential problems referred to. Do not deliver to any of your customers any Systems which have not been examined by an ITR authorized representative.

To avoid any possibility of the Systems that you have overheating and potentially causing a fire please turn the Systems OFF. A master off-on switch is located on the side of the electronic control box which will be located adjacent to the Heater. Place the switch in the OFF position.

ITR wants to reach all owners of units containing Hurricane Systems. We will be offering them the same modifications as we are offering to you. To assist us in reaching those owners please send us a list at your earliest convenience of all of the customers who have bought units from you which contain Hurricane Heating Systems - with names, addresses and telephone numbers - so that we can immediately contact them.

Please immediately reply to this Notice by telephone (1-800-755-1272), fax or e-mail. We want to schedule a visit to your facility at the earliest possible moment to do modifications and upgrades.

Sincerely,

Edgar Robinson, President
INTERNATIONAL THERMAL RESEARCH LTD.

Address 207-936 Peace Portal Drive, BLAINE, WA, 98230

Subject to NHTSA approval