FREIGHTLINER® LLC
A DaimlerChrysler Company

Timothy A. Blubaugh
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April 27, 2006

06V-150
(14 pgs.)

Dan Smith
Associate Administrator for Vehicle Safety
National Highway Traffic Safety Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

Re: Defect Information Report FL-473, Ricon Wheel Chair Lift

Mr. Smith:

In accordance with Part 573 of Title 49 of the Code of Federal Regulations, Freightliner LLC herewith reports a safety campaign to recall approximately 45 Thomas Built buses, manufactured from June 16, 2005 through July 1, 2005.

Attached is Freightliner's Defect Information Report, Ricon's Defect Information Report and a copy of Ricon's customer letter.

Please contact me if you have any questions.

Sincerely yours,

Timothy Blubaugh

Timothy Blubaugh

Cc: Michael Mason, CAL-OSHA
DOSH, Legal Unit
10th Floor
455 Golden Gate Avenue
San Francisco, CA 94102

Enclosure

Certified Mail Article Number: 7003 2260 0001 3403 4490

FREIGHTLINER® LLC

A DaimlerChrysler Company

Defect Information Report

(Section 573.6)

April 27, 2006

(c)(1) Manufacturer: Freightliner LLC
P.O. BOX 3849
Portland, Oregon 97208
(503) 745-5219

Brands: Thomas Built Buses

(c)(2) Vehicles identification:

Model(s) affected: Thomas Bus Minotour, FS65, MVP-EF and HDX
Manufacture Dates: June 16, 2005 to July 1, 2005.
Basis for determining population: First and last vehicle built with defective wheel chair lift
Component manufacturer if other than the vehicle manufacturer:
Ricon Corporation
7900 Nelson Road
Panorama City, CA 91402
William Hinze, Vice President, Marketing 1-818-267-3012

(c)(3) Total number of vehicles potentially affected: approximately 45

(c)(4) Percentage of vehicles estimated to contain the defect: See attached Ricon Safety Recall 06E-003

(c)(5) Description of the defect: Cracks in the lift arms may allow the mechanism to twist during stowage, preventing closure of the safety interlock switches. See attached Ricon Safety Recall 06E-003

49CFR Section 577.5(f) Evaluation of the risk to motor vehicle safety: In the event this condition occurs during passenger operations, it may not be possible to close the lift door causing the vehicle interlocks to remain engaged, preventing movement of the vehicle or the ability to load or unload passengers with disabilities. See attached Ricon Customer letter.

(c)(6) Chronology of principal events: Freightliner and Thomas Built Buses were notified of the defect by Ricon on March 17, 2006. See attached Ricon Safety Recall 06E-003.

(c)(7) Noncompliance-test or other data: not applicable

(c)(8) Remedial program: The vertical lift arms will be replaced. Repairs will be performed by Ricon at no charge to the owner. Ricon will administer the campaign.

Estimated Owner Notification Date: Customer notification will be by first class mail using Thomas Bus records to determine the customers affected. Thomas Bus will complete this approximately May 30, 2006

Reimbursement Plan: Copies will be submitted as a supplemental report when available.

(c) (9) Communications sent to dealers and owners: Copies will be submitted as a supplemental report when available.

(c) (10) Copy of proposed owner notification letter: A draft will be sent for ODI review when available.

(c) (11) Manufacturer's campaign number: FL-473

062 003

RICON®

January 23, 2006

National Highway Traffic Safety Admin.
Defects and Recall Information Analysis Division
400 7th Street SW
Washington D.C. 20590

Subject: Part 573 Defect and Noncompliance Responsibility Report
Reference: ODI Investigation PE-06-003, Cracked Welds on Wheelchair Lift Vertical Support Arms

Gentlemen:

On January 20, 2006, Ricon Corporation decided that a defect which relates to motor vehicle safety 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 Responsibility and Reports.

This report was prepared on January 20, 2006

The full corporate name of the fabricating manufacturer is:

Ricon Corporation
7900 Nelson Road
Panorama City, CA 91402

The corporate officials that the agency should contact with respect to this recall are:

William Baldwin
President
wbaldwin@riconcorp.com
Ph. 818 267-3005
Fx. 818 267-3187

William Hinze
Vice President - Marketing
bhinze@riconcorp.com
Ph. 818 267-3012
Fx. 818 267-3139

Sincerely,

W.L. Baldwin
President

Ricon Corporation
Part 573 Defect and Noncompliance Responsibility Report
Vertical Support Arms

I. Identify the Recalled Items of Equipment Involved in this Recall:

a. This recall applies to the "Vertical Support Arms" (Vertical Arms) that are used on Ricon's platform style wheelchair lifts. There are three different sizes (lengths) of vertical arms; one each for the "1200", "2000", and "5500" Series wheelchair lifts. Please refer to Appendix I for representations of these products.

b. There are two vertical arms on each lift. The vertical arms attach the platform section to the lifting frame section of the lift. The arms are "handed" (i.e. right or left side) on the "K" Series lifts, but they are not handed on the "S" Series lifts.

c. There are two generic and/or brand names for these platform lifts, which includes both FMVSS 403 Public Use and Private Use applications:

(1) "S" Series
(2) "K" Series

d. The model numbers for the "S" Series lifts are:

(1) S1200
(2) S1231
(3) S2005
(4) S2010
(5) S5505
(6) S5510

e. The model numbers for the "K" Series lifts are:

(1) K1200
(2) K2005
(3) K2010
(4) K5505
(5) K5510

II. Identify the Recall Population:

a. The recall includes FMVSS 403 compliant "S & K" Series platform style wheelchair lifts that were manufactured between June 12, 2005 and July 1, 2005 inclusive.

b. The FMVSS compliant platform lifts covered by this recall represent approximately 50% of Ricon's normal production in any given month. The other units include ramps and wheelchair lifts of different designs that do not incorporate the vertical arm. For the period June 12, 2005 to July 1, 2005 Ricon production was as follows:

(1) Total lifts/ramps produced by Ricon: 1,247 units (100%)

(2) "S" Series lifts produced: 422 units (34% of total units)

(3) "K" Series lifts produced: 166 units (13% of total units)

c. Total number of lifts potentially affected by the Recall is 588 units.

d. A breakdown of the affected lifts by model type and serial numbers is included as Appendix II.

e. Ricon estimates that the total number of vertical arms that actually are defective (i.e. less than full penetration weld) to be in the range of 3 – 5 % of the total population.

f. The recall population is based on Management's best estimate of the possible time frames involved. As described in more detail in the next section, the "defect" is the result of seam weld that did not achieve full penetration. This weld is done on a robotic welder using a controlled fixture. Ricon has two such robotic welders, which though similar in design, are not identical. Previously this weld was done on the "smaller" of the two robotic welders, but some time on or about June 12, 2005, an unknown number of vertical arms were welded on the "larger" robotic welder. Internal inspections identified the problem shortly thereafter, and the problem was corrected (introduction of weld process change) by July 1, 2005.

III. Describe the Defect:

a. The potential defect is in the weld joint of the vertical arm. The vertical arm is formed using 7-gage hot rolled steel. As shown in Figure 1, the top section of the arm is bent and welds are applied to both sides of the exterior portion of the arm. During the time in question the interior section of the arm was not welded (Figure 2). One of the subsequent corrective actions taken by Ricon was to weld the interior portion of the arm joint (Figure 3).

b. Ricon has determined that the potential defect is the result of welds that did not achieve full penetration. As noted in the previous section, this welding operation was typically done on Ricon's smaller robotic welder. At some point in time between June 12th and July 1st, welding operations for these items were transferred to Ricon's larger robotic welder. Though similar in design, the two robotic welders are not identical and therefore have slightly different characteristics. Our internal analysis found that there are differences between the power supplies for the two robots. There are parameters in the welding software related to current, frequency and duty cycles for a given weld. This is in addition to the position, speed of movement and wire feed rates. These parameters were not directly transferable between the two machines. This resulted in a weld that appears correct, but may lack sufficient penetration to achieve the design requirements.

c. The potentially defective arms were subsequently used in the production of finished lifts. Each lift is inspected at the time of assembly and is weight tested using the full rated load of the lift (either 600 or 800 pounds depending on the style lift).

d. Subsequent testing conducted at Ricon indicated that, when properly welded, the joint in question did not crack. Pull tests indicated that the base metal yielded prior to the weld.

e. Analysis of field failures and subsequent testing performed at Ricon indicated that welds are cracking during the "stow" phase of the lift cycle. This is when the unloaded lift is moved from the floor level of the vehicle to its stowed condition. Analysis of the dynamics shows that the weld joint is in compression when occupied, but in tension while being stowed. Ricon performed testing on lifts with one bad weld joint and further testing on a lift with two bad welds. To simulate a "bad" weld we actually eliminated the weld altogether, as shown in Figure 4. Hence the tests were conducted under a worst-case scenario. Under both sets of conditions the lifts were loaded with their rated load (800 pounds) and then 3 times the rated load (Figure 5). The tests showed that when loaded, the weld joint was in a compressive state and the lift moved from ground level to vehicle floor level without a problem (Figure 6). However, when the weight was removed and the lift was stowed,

the tests showed that the weld joint was in tension and the joint opened significantly (Figure 7).

f. Once the weld joint fails it appears that the lift becomes very difficult to stow (Figure 8), which is very noticeable to the lift operator. This is a result of twisting movement at the weld joint which causes the lift platform to shift to one side. This shifting makes it very difficult to stow the lift as a platform tends to strike the side of the bus (Figure 8). Likewise during the deployment phase, the platform will appear to be out of square and will strike the door opening (Figure 9). If the operator manages to get the lift to the vehicle floor level, the lift will appear to be out of adjustment with one side of the platform extending further out from the door opening. Under such conditions it would be very difficult, if not impossible to load a wheelchair on to the lift platform because the inner barrier (bridge plate) is so far out of adjustment. Because of the tensile load that occurs during the stow cycle, we believe that the problem is most likely to occur when the operator is attempting to stow an unloaded lift. Please note that other design features of the lift make it impossible to "stow" the lift if there is weight on the platform or inner barrier. From the testing conducted to date and from information provided from field reports, it is not clear how long before a defect prone lift will exhibit signs of cracking. We do know that the lifts were cycle tested and weight tested at Ricon prior to shipment. Although field reports have been sporadic, it appears that the cracks in the weld joint occur soon after the lift has been put into operation. We have reports of a very small number of lifts showing signs of cracking at the OEM's facilities (where they are installed in the buses), but for the most part the failures have been identified in the field after very limited operation.

g. The defect is not the result of a failed purchased component. Ricon is the manufacturer of the vertical arms in question.

IV. Chronology in Determining the Defect

Date	Event
6/12/05	Ricon begins production of vertical arms on 2d robotic welder.
6/15/05	Ricon Quality Assurance identifies problems with welds

7/01/05	Internal corrective actions / additional process steps added to weld internal seam
7/01/05	Internal testing to verify process changes (pull tests)
8/16/05	First notification from OEM of cracked welds
9/06/05	First notification from end user of cracked welds
1/05/06	Receipt of NHTSA ODI Resume
1/13/06	Additional laboratory testing at Ricon (simulating cracked welds)

V. Identify the Remedy:

a. The first step in the remedy process should be to alert the OEM's and their end users to the potential problem. As identified above, the "scope" is potentially 588 FMVSS compliant wheelchair lifts manufactured between June 12, 2005 and July1, 2005. This universe includes all FMVSS compliant "platform" style lifts manufactured during this period.

b. OEM notification shall include a technical description of the problem and a list, by serial number of the lifts in question. It will also provide instruction for inspection and/or remedy as outlined below (Appendix III)

c. In some cases (less than 20%), Ricon sold the product directly to a bus dealer or equipment installer (i.e. not an OEM). Here Ricon will notify the dealer directly with the same information outlined in V. (b) above.

d. Approximately 12% of the total lifts in question were sold to customers outside of the United States. Ricon will follow the same notification and remedy process with these foreign customers.

e. The notification process shall include instructions to identify the lift by serial number and to visually inspect the exterior weld joints on the lift. It will also include instructions to inspect these joints during the "stow" cycle, as this is when the problem is most visible (Figures 7,8). Instructions will also be provided to assist the operator in identifying symptoms and/or warnings that could occur prior to failure.

f. The owner/operator will be instructed to immediately pull the lift out of operation and notify Ricon's Customer Service department. Depending on location, the operator will be directed to an authorized Ricon Service Center where the repair operations will be completed. In this case the "repair" will be removal of the old arms and replacement with new vertical arms manufactured by Ricon. Alternatively, some end users are already qualified to replace the vertical arms. These customers will be instructed to contact Ricon's Customer Service department to coordinate the shipment of replacement vertical arms.

g. Ricon will provide two new replacement arms at no charge to the customer/end user. If one arm is to be replaced we believe that both arms should be replaced at one time. In addition to providing the material at no charge, Ricon will provide up to one (1) hour of labor reimbursement per lift in accordance with our published labor standards (Appendix IV). Reimbursement credit will be at Ricon's published rate of $ 62.00 per hour.

h. Ricon will provide a one-year parts and labor warranty on all replaced arms.

i. Sample recall documentation is provided in Appendix III.

j. The result of our internal investigation indicates that the root cause of the potential defect is failure to properly control a robotic welding process. Subsequent testing conducted at Ricon indicates that properly welded vertical arms, when subject to a tensile load that is several times the level that occurs during normal lift operation, the parent metal will yield at a proximate location before the joint in question exhibits signs of cracking. Accordingly, to prevent a recurrence of this problem, Ricon has implemented the following corrective actions:

    (1) An improved welding process specific to each of the two machines.
    (2) The addition of a manual weld along the inside joint.
    (3) Increased in-process inspections and 100% inspection at final assembly.
    (4) Verification through destructive testing to ensure design parameters are achieved.

VI. Recall Schedule:

a. Ricon proposes the following Recall Schedule. Please note that the "dates" are in days after NHTSA approval of final documentation (DAA):

Date	Action
10 DAA	Notify domestic (US) OEM's, providing recall instructions and list of serial numbers in question.
15 DAA	Notify domestic (US) Dealers, providing recall instructions and list of serial numbers in question.
30 DAA	Notify foreign (non US) customers (OEM's and/or Dealers) providing same information as above.
90 DAA	Report Quarterly results to NHTSA and OEM's (Q1)
180 DAA	Report Quarterly results (Q2)
270 DAA	Report Quarterly results (Q3)
360 DAA	Report Quarterly results (Q4)
450 DAA	Report Quarterly results (Q5)
540 DAA	Final Quarterly report

Ricon Corp.
Part 573 Defect and Noncompliance Responsibility Report
List of Enclosures

List of Figures:

RICON®

INNOVATION IN MOBILITY™

March 17, 2006

Mr. Safety Manager
SAF- T-Corp
123 Safety Lane
Protection, PA

RE: Equipment Defect Notification

This notice is sent to you in accordance with the requirements of the National Traffic And Motor Vehicle Safety Act.

Dear Mr. Manager,

Ricon Corp. needs your assistance in notifying your customers about a recall of certain wheelchair lift products built between June 12, 2005 and July 1, 2005 inclusive. Ricon Corporation has determined that a **safety** defect may exist in certain wheelchair lifts manufactured by Ricon on the above dates.

WHAT IS BEING RECALLED:

This recall process applies to the "Vertical Arms" only that were used on Ricon's "1200, 2000 and 5500" series platform lifts. It does not apply to other Ricon products.

WHY IS IT BEING RECALLED:

The potential **safety** defect is the result of a welding process that may not have achieved full penetration along the seam of the weld. Through our testing and analysis we have determined that a weld with less than full penetration will exhibit signs of cracking along the exterior portion of the vertical arm. This will be most visible when the lift is in the **stowed** position since this is when the weld joint is in tension. Signs of cracking **may not** be visible when the platform is **at floor level or below or is occupied** because the weld joint is in compression at this time. We are not certain how many cycles it takes for the problem to surface. However, once a weld joint cracks, the lift will become difficult to stow or deploy. During these operations the lift will typically twist to one side and often hit the door frame of the vehicle. When stowed, the lift will typically lean into the vehicle more than normal. A driver or attendant can easily notice both conditions. **In the event this condition occurs during passenger operations it may not be possible to close the lift door causing the vehicle interlocks to remain engaged preventing movement of the vehicle or the ability to load or unload passengers with disabilities from the vehicle.**

Ricon Corporation
7900 Nelson Road, Panorama City, California 91402
Tel 818-267-3000 • Toll-Free 800-322-2884 • Fax 818-267-3001
www.riconcorp.com • e-mail: sales@riconcorp.com

WHAT YOU AS THE OEM NEED TO DO:

Ricon has enclosed a complete list of the lifts you purchased that were manufactured during the specified time period. We have included all lift models and serial numbers. **This information will help you identify your end-user customers and provide the following instructions to them:**

1. Place the vehicle in a safe position and operate the lift through one complete cycle unoccupied.
2. With the lift in the stowed position, inspect the exterior weld seams on each side of BOTH vertical arms looking for visible signs of cracking.
3. If the lift operates normally and you have seen no signs of cracking along the weld joints, the lift may continue to be safely operated. This visual inspection should be repeated during each scheduled maintenance interval as outlined in the Ricon operator's manual.

If there are visible signs of cracking, or you have difficulty deploying or stowing the lift, the operator should take the following steps:

a. Return the lift to the stowed position in the vehicle and turn off power to the hand control.
b. Tag the lift to show it is NOT OPERATIONAL following your own "lockout/red tag" procedures.
c. Contact Ricon Customer Support Dept at 800-322-2884 to report the lift's condition.
d. DO NOT USE THE LIFT again until an authorized factory-trained technician has completed all repairs.

WHAT RICON CORPORATION WILL DO:

Upon notification from your end-user customer, Ricon will work with them to replace the vertical arm (s) as quickly as possible. If the end-user is already factory trained to perform this service, the repairs can be done at the operator's location. If the end-user is not factory trained to perform this service, we will arrange for the repairs to be done at the nearest Ricon authorized service center/dealer. In some cases, we may have these repairs performed by Ricon Corp. personnel.

Ricon Corporation
7900 Nelson Road, Panorama City, California 91402
Tel 818-267-3000 • Toll-Free 800-322-2884 • Fax 818-267-3001
www.riconcorp.com • e-mail: sales@riconcorp.com

The lift repair requires replacement of the cracked vertical arm (s). Ricon has elected to replace both arms on each lift even if both are not cracked. We will provide all the necessary replacement parts at No Charge. If the repairs are done by the end-user, Ricon will pay one-hour labor at $62.00 in accordance with our " Labor Allowance Schedule".

Ricon will provide a full one-year parts and labor warranty on the new arms.

If the lift is repaired by an authorized Ricon dealer and it is not completed within 3 business days, please notify Ricon Customer Support at the toll free number listed above.

If, after contacting the authorized dealer and Ricon Customer Support, your repair is not completed in a reasonable time and without charge you may notify:

Administrator
National Highway Traffic Safety Administration
400 Seventh Street, S W
Washington, D. C. 20590
Phone (888) 327-4236
(D.C. residents only – 202-366-0123)

Ricon Corp. will take responsibility for compiling and submitting required "Quarterly Reports" to NHTSA covering end-user repairs upon receipt of the customer (end-user) contact information from each OEM.

Thank you for you prompt attention to this matter. If you have any questions concerning these procedures please contact the undersigned at (818) 267-3075 or by email at **lmcutt@riconcorp.com**.

Sincerely,

Larry McNutt
Director of Customer Support
Ricon Corp.