



GILLIG CORPORATION

BOX 3008
HAYWARD, CALIFORNIA
94540-3008
TELEPHONE 510/785-1500
FAX # 510/785-6819

February 1, 2007

AK

George Person
Head-Recall Management Division
US DOT-National Highway Traffic Safety Administration
Office of Defects Investigation (NBS-215)
400 - 7th Street SW
Washington, DC 20590

**07V-057
(30 pages)**

Re: Safety Recall - Lift-U Wheelchair Lift Linkage

Dear Mr. Person:

This letter is written to inform you of Gillig Corporation's intention to notify customers of a safety defect related to Lift-U wheelchair lifts installed in Gillig transit buses manufactured from 1989 to 1997. The recall effects 4256 buses.

Lift-U informed Gillig of its recall 06E-093 and we are being required to conduct customer notification of the Gillig vehicles involved in the recall. Lift-U supplied Gillig with a package of information including a customer listing.

Attached is Gillig's 573 Report. If you have any questions please give me a call at 510-264-5031 or e-mail chuck.koske@gillig.com

Sincerely,

GILLIG CORPORATION

Charles E. Koske
Senior Vice President Engineering

CEK/vo
Attachment

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

On January 26, 2007 Gillig Corporation decided that a defect which relates to motor vehicle **safety**) exits 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: January 30,2007

Furnish the manufacturer's identification code for this recall (if applicable): N/A

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**.

Gillig Corporation Hayward, California

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

Charles E. Koske Sr. Vice President

Telephone Number: 510-264-5031 Fax No.: 510-264-3897

Name and Title of Person who prepared this report.

Charles E. Koske

Sr. Vice President

Signed: 

1

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.

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) 366-5227 or by FAX at (202) 366-7882.

I. Identifv 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): Gillig Corp **Model Years Involved:** 1989 through 1997 **Model(s):** Phantom

Production Dates: **Beginning:** 11/17/1989 **Ending:** 2/4/1997

VIN Range: Beginning:

Vehicle Type: Bus **Bodystyle:** High floor bus

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

All Phantom models equipped with Lift-U front door wheel chair lifts as identified by Lift-U Division of Hogan Manufacturing. Lift-U provided Gillig with the serial number listing.

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.

100% of the identified population

11. Identifv the Recall Population

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

<u>Model</u>	<u>Year</u>	<u>Number of Vehicles Potentially Involved</u>
Phantom	1989-1997	4256

Total Number Potentially Affected by the Recall: 4256

4. Furnish the approximate percentage of the total number of vehicles estimated to actually contain the defect or noncompliance:

100%

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:

Per Lift-U's form 573 report the lift was first manufactured in 1986 and newer model lifts were supplied with a different **flatbar** linkage beginning in late 1996.

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 Lift-U 573 Defect and Noncompliance report and their Solid Bar Linkage report dated 9-18-06 for all responses under defect description.

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

Certain Lift-U wheelchair lifts equipped with a solid bar barrier linkage have the possibility for a person to wedge their feet under the linkage.

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

It is possible that a person with no shoes and no control of their foot could twist their foot and get it forced under the linkage while sitting in a wheel chair which could result in a cut.

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

Gillig is unaware of the specifics as to if a warning exists.

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

Lift-U Division of Hogan Manufacturing, Inc.
P.O. Box 398
Escalon, Ca 95320

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

Paul Reichmuth
General Manager

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 Lift-U report dated 9-18-06. Lift-U informed Gillig via telephone call in late December of 2006 that they had declared a recall on wheelchair lifts and that NHTSA had instructed them to have OE's conduct the recall notification. Gillig received an information package with the recall information last week.

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.

See attached Lift-U report dated 9-18-06.

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 Lift-U supplied information on the 9-18-06 report – specifically item 6.4. The work to be done is outlined on drawing 123-1033 with parts detailed on drawing 123-1029, 123-1032, and 524-0197.

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

See Lift-U's 9-18-06 report.

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.

Solid bar linkage design was discontinued on new lifts manufactured by Lift-U in 1996.

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.

Gillig plans to begin customer notification within 5 days of receipt of a recall number and review of our draft letter.

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.**

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

The Privacy Act of 1974 - Public Law 93-579, As Amended: This information is requested pursuant to the authority vested in the National Highway Traffic Safety Act and subsequent amendments. You are under no obligation to respond to this questionnaire. Your response may be used to assist the NHTSA in determining whether a manufacturer should take appropriate action to correct a safety defect. If the NHTSA proceeds with administration enforcement or

litigation against a manufacturer, your response, or statistical summary thereof; may be used in support of the agency's action

Safety Defect and Noncompliance Report Guide for Equipment
PART 573 Defect and Noncompliance Report⁴

On NOV 11, 2006, 2001, XXX LIFT-U [MFR] decided that (a defect which relates to motor vehicle **safety**)(a **noncompliance** with Federal **Motor Vehicle Safety Standard** No. _____) exits 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: NOV. 11, 2006

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.

LIFT-U DIV OF HOGAN MFG., INC.

P.O. BOX 398

ESCALON, CA 95320

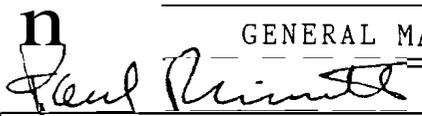
Identify the corporate official, by name and title, **whom** the agency should contact with respect to this recall.

PAUL REICHMUTH

GENERAL MANAGER

Telephone Number: 209-838-2400 Fax No.: 209-838-6283

Name and Title of Person who prepared this report.
PAUL REICHMUTH

Signed:  GENERAL MANAGER

⁴Each manufacturer must furnish a report, to the Associate Administrator for Safety Assurance, 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) 366-7883.

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: SOLID BAR LINKAGE ON WHEELCHAIR LIFT

Make: _____ Model: _____

Part Number: _____ Size: _____

Function: BARRIER LINKAGE

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

PARTS 184-0042, 184-0041, 123-0288 AND 123-0287 WHICH MAKE UP
THE SOLID BAR LINKAGE AS SHOWN ON ASSEMBLY DRAWING 184-0060

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.

100 %

II. Identifying the Recall Population

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

<u>Model</u>	<u>Year</u>	<u>Number of Items Potentially Involved</u>
SOLID BAR LINKAGE	1986 THROUGH 1996	18,093

Total Number Potentially Affected by the Recall: 18,093 ^{*} 4,256

4. **Furnish** the approximate percentage of the total number of items of equipment estimated to actually **contain** the defect or noncompliance: 100%

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: _____

FIRST MANUFACTURED IN 1986 - NEWER MODEL LIFTS SUPPLIED WITH
FLATBAR LINKAGE BEGINING IN 1996.

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 REPORT DATED 9-18-06

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

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

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

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**.

SEE ATTACHED REPORT DATED 9-18-06.

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.

554 **SEE ITEM 6.4 ON ATTACHED REPORT DATED 9-18-06. THE**
WORK TO BE DONE IS OUTLINED ON DRAWING 123-1033 ALONG
WITH PARTS DETAILED ON DRAWING 123-1029, 123-1032
AND 524-0197.

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.

SOLID BAR LINKAGE DISCONTINUED ON NEW LIFTS IN 1996 .

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.

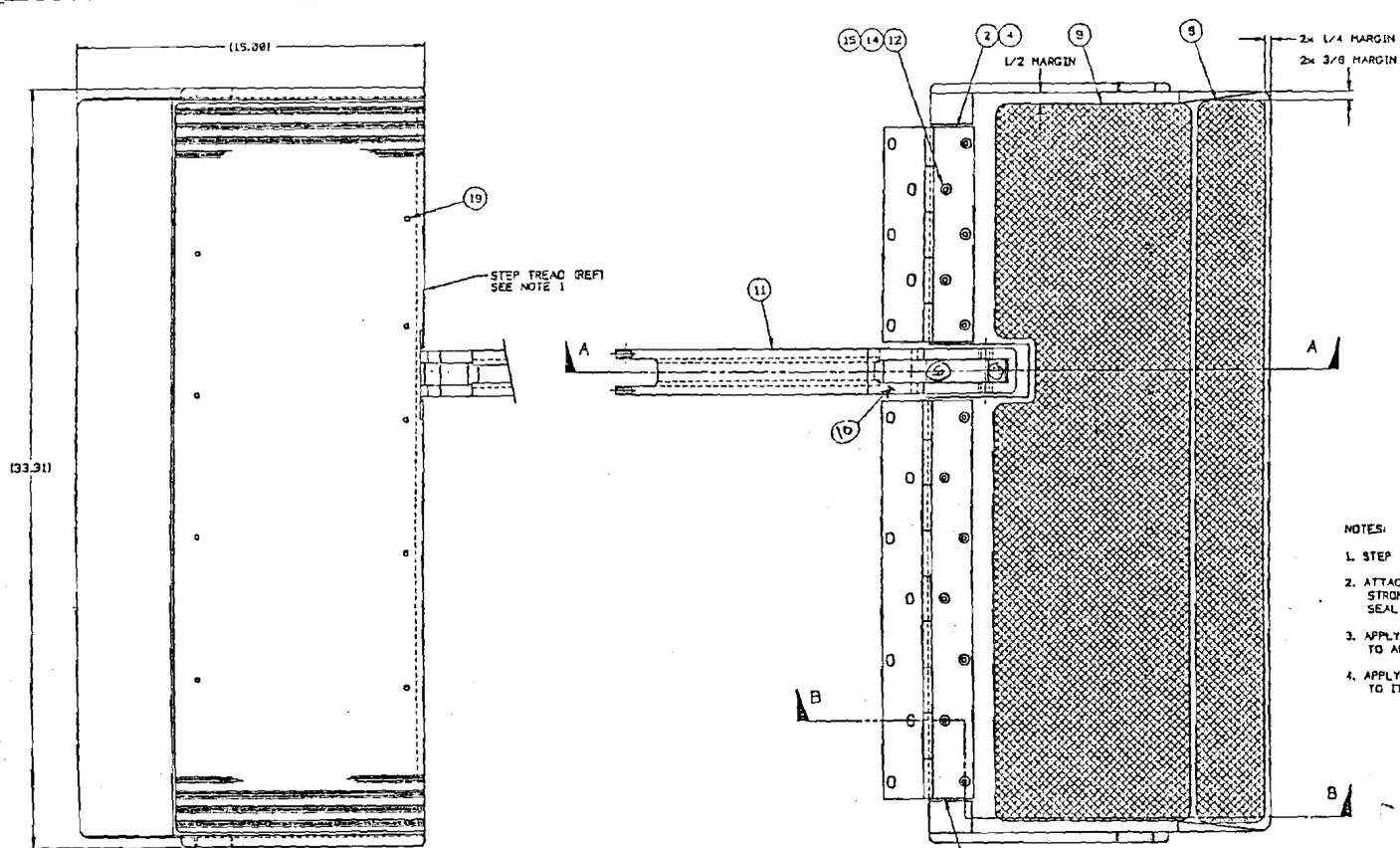
PLAN TO START RECALL WITHIN 30 DAYS AFTER REVIEW BY NHTSA.

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.*

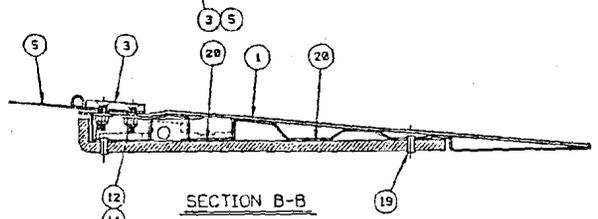
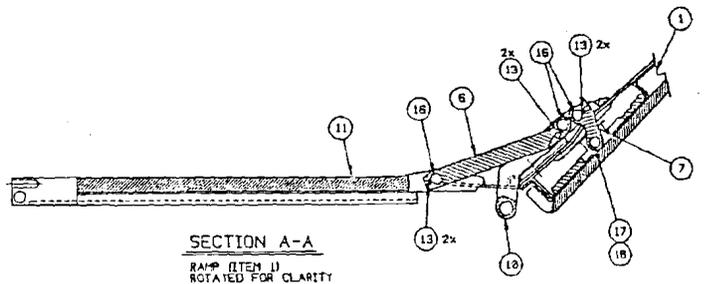
Note: These documents are to be submitted **separately** from those provided in accordance with Part 573.8 requirements.

REVISIONS						
LTR	EQD	APPR	DATE	DESCRIPTION	OFTR	DATE
A	3372	BSA	03-10-92	RELEASED	AJM	02-19-92
B	3352	SI	04-10-92	ITEM 14 WAS P423-2103	AJM	04-13-92
C	3368	BSA	04-29-92	REDESIGNED WELDMENT, ITEM 1 WAS Q129-0029	RTR	04-28-92
D	3383	CSV	10-30-92	CHANGE TO HINGES & CLAMP BARS WITHOUT NOTCHES	RTR	10-22-92
E	3395	BSA	11-16-92	ITEM 13 WAS P417-1153 & QTY WAS 3 ADDED ITEM 20 & REV NOTE 2.	RFJ	11-12-92
F	3491	BSA	12-09-93	ITEM 12 WAS P413-2406	BSA	12-09-93
G	14333	AZ	10-27-11	ITEM 9 WAS 123-0723	CAX	10-27-11



NOTES:

- STEP TREAD PART NUMBER AND COLOR IS INDICATED ON LIFT PACKAGE.
- ATTACH STEP TREAD BY USING TWO-SIDED TAPE (ITEM 20) AT CENTER RIBS OF STRONGBACK PLATE THEN USE ITEM 19 AT PERIMETER TO HOLD IN PLACE. SEAL EDGES WITH BLACK SILICONE CAULKING (LIFT-U P/N 517-0001).
- APPLY LOCTITE NO. 242, BLUE (LIFT-U P/N 516-0010) TO ALL SETSCREWS PER MANUFACTURER'S INSTRUCTIONS.
- APPLY COMMERCIAL ANTI-SEIZE LUBRICANT (LIFT-U P/N 515-0007) TO ITEMS 16 AND 17 PRIOR TO ASSEMBLY.



ITEM	PART NO.	QTY	DESCRIPTION
20	516-0013	A/R	TWO-SIDED TAPE, 2" WIDE, 66'L
19	440-0002	13	BLDG RIVET, DOME HD, 3/16" DIA, 251-.375" GRIP, SSI
18	434-2003	2	COTTER PIN, SSI, 3/32" DIA, 3/4"L
17	434-1505	1	RAMP/BARRIER PIVOT PIN
16	434-1411	3	PIVOT PIN, 2"
15	428-2104	12	SAE WASHER, 1/4, PLD
14	423-2401	12	NYL DISK LOCKNUT, LT, 1/4-20, PLD
13	417-3001	5	ALLOY SOCKET SET SCREW, OVAL PT, 40-32, 1/4"L, PLD
12	413-2408	12	HEX SOC FLTHD CAPSCREW, 1/4-20, 1"L, PLD
11	184-0042	1	SLIDING LINK ASSEMBLY
10	184-0041	1	PIVOT LINK ASSEMBLY
9	123-0724	1	RAMP SAFETY WALK
8	123-0725	1	RAMP SAFETY WALK, EDGE
7	123-0288	1	FLOATING LINK
6	123-0297	1	DRIVE LINK
5	123-0745	1	RAMP HINGE, REAR
4	123-0745	1	RAMP HINGE, FORWARD
3	123-0744	1	HINGE CLAMP BAR, REAR
2	123-0743	1	HINGE CLAMP BAR, FORWARD
1	120-0031	1	RAMP/BARRIER WELDMENT

UNLESS OTHERWISE SPECIFIED:		COATING/FINISH	
-INTERPRET DRAWING PER ANSI Y14, CURRENT REV.		DESC:	NONE
-DIMENSIONS ARE IN INCHES.		SPEC:	NONE
-FINISH ALL PROCESSED SURFACES TO 100" MAX.			
-DIMENSIONS APPLY TO FINISHED PART, BEFORE PAINTING.			
-DEBURR ALL SURFACES AND BREAK ALL EDGES.			
-TOLERANCES (+ OR -)			
DECIMAL: .XX --- .01 FRACTION: 1/16			
XXX --- .010 ANGLE: 1/2 DEGREE			

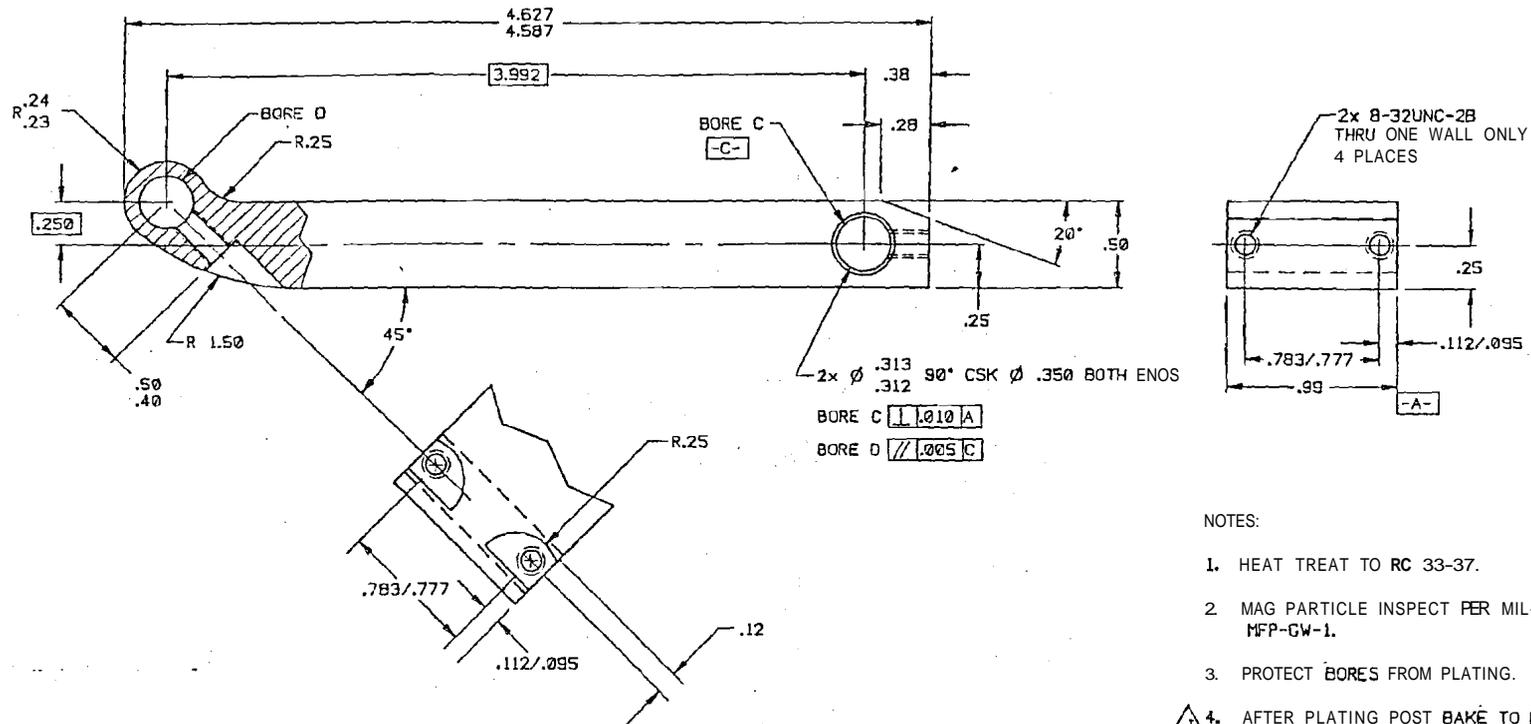
MODEL NO	LUB28	TITLE	RAMP/BARRIER ASSEMBLY
SCALE	3/8" = 1"	DOC NO	D 184-0050
		REV	G

LIFT - U

A DIVISION OF
HOGAN MFG. INC.
CEN. ON CALIFORNIA

SEE DRAWING FOR DIMENSIONS AND TOLERANCES. THIS DRAWING IS THE PROPERTY OF HOGAN MFG. INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. THIS DRAWING IS UNCLASSIFIED.

REVISIONS									
LTR	ECO	APPD	DATE	DESCRIPTION	DFTR	DATE	CHKR	DATE	
G	3395	BSA	11-16-92	REDESIGNED FOR 4 SET SCREWS	RCF	11-12-92	BSA	11-16-92	
H	3395	BSA	11-18-92	.112/.095 WAS .105/.100	BSA	11-18-92	BSA	11-18-92	
I	3692	BSA	10-21-96	ADD NOTE 3	TCB	10-07-96	BSA	10-21-96	
J		BL	3-22-01	REVISED PLATING SPEC.	WAC	03-22-01	BL	3-22-01	



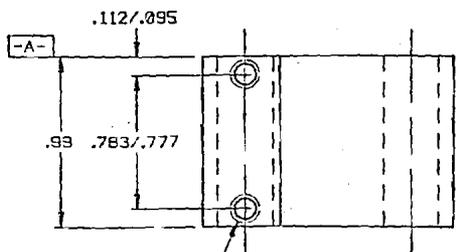
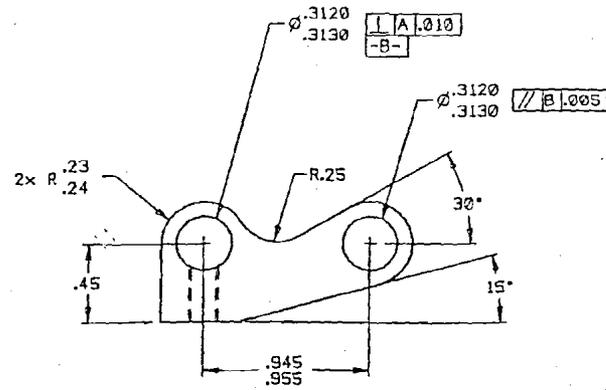
NOTES:

- HEAT TREAT TO RC 33-37.
- MAG PARTICLE INSPECT PER MIL-STO-1349, MFP-GW-1.
- PROTECT BORES FROM PLATING.
- AFTER PLATING POST BAKE TO REMOVE HYDROGEN EMBRITTLEMENT.

ALLOY STEEL, CF; 3/4 x .99 x 4.63	4148, AIRCRAFT QUALITY
DESCRIPTION	SPEC

<p>UNLESS OTHERWISE SPECIFIED:</p> <p>-INTERPRET DRAWING PER ANSI Y14, CURRENT REV.</p> <p>-DIMENSIONS ARE IN INCHES.</p> <p>-FINISH ALL PROCESSED SURFACES TO $\frac{125}{V}$ MAX.</p> <p>-DIMENSIONS APPLY TO FINISHED PART, BEFORE PAINTING.</p> <p>-DEBURR ALL SURFACES AND BREAK A U EDGES.</p> <p>-TOLERANCES 1+ OR -11</p> <p>DECIMAL: .XXX — .03 FRACTION: 1/16</p> <p>.XXX — .010 ANGLE: 1/2 DEGREE</p>	<p>COATING/FINISH</p> <p>OESC: ELECTROLESS NICKEL PLATING</p> <p>SPEC: AMS 2404C 1.0005 THK1</p>	<p> LIFT - U</p> <p>A DIVISION OF</p> <p>HEZEL HESTER INC</p> <p>ESCALON, ILL. 61820</p>	<p>TITLE</p> <p>DRIVE LINK</p>	
	<p>FIRST USE</p>			<p>DOC NO</p> <p>123-0287</p>
	<p>MODEL NO 9035</p>			<p>REV J</p>
	<p>SCALE NONE WGT</p>			

REVISIONS									
LTR	ECO	APPD	DATE	DESCRIPTION	CFTR	DATE	CHKR	DATE	
E	3395	BSA	11-16-92	REDESIGNED FOR 2 SBT SCREWS	RCF	11-12-92	BSA	11-16-92	
F	3395	BSA	11-18-92	.112/.095 WAS .105/.100			BSA	11-18-92	
G	3892	BSA	1a-21-961-00NOTE 3				TCB	10-17-96	BSA 10-21-96
H		RCF	3-22-01	REVISED PLATING SPEC.	WAC	03-22-01	gk	11-22-01	



B-32UNC-2B
 [A] .04 [B]
 THRU ONE WALL ONLY
 2 PLACES

- NOTES:
- HEAT TREAT TO RC 33-37.
 - MAG PARTICLE INSPECT PER MIL-STO-1949, MFP-GW-1.
 - PROTECT BORES FROM PLATING.
 - AFTER PLATING POST BAKE TO REMOVE HYDROGEN EMBRITTLEMENT.

ALLOY STEEL, CF; 3/4 x .99 x 1.44		4140, AIRCRAFT QUALITY
DESCRIPTION		SPEC
LIFT - U		THIS DOCUMENT IS AND CONTAINS CONFIDENTIAL TRADE SECRET INFORMATION OF THE COMPANY. NO PART OF IT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONICALLY, MECHANICALLY, PHOTOCOPIED, OR OTHERWISE, WITHOUT PRIOR WRITTEN PERMISSION OF HOGAN MFG. INC. THIS DOCUMENT IS LOANED FOR THE LIMITED PURPOSES STATED HEREON ONLY, AND REMAINS THE PROPERTY OF THE COMPANY.
TITLE		FLOATING LINK
DOC NO	123-0288	REV 11

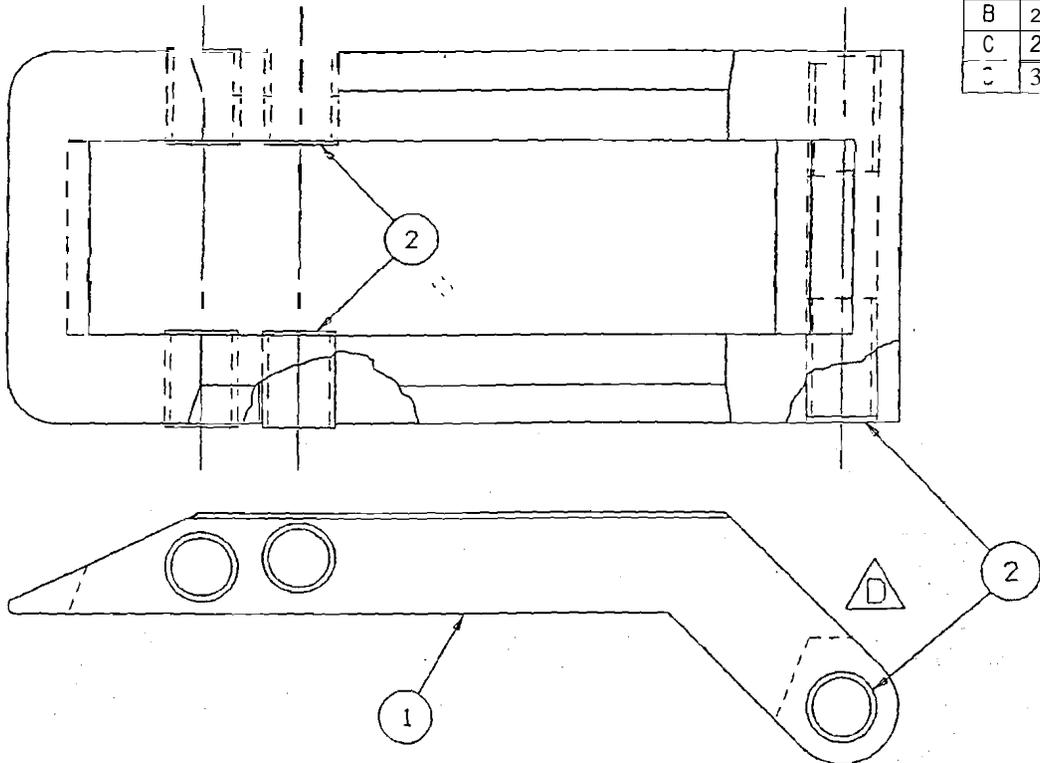
UNLESS OTHERWISE SPECIFIED:
 -INTERPRET DRAWING PER ANSI Y14, CURRENT REV.
 -DIMENSIONS ARE IN INCHES.
 -FINISH ALL PROCESSED SURFACES TO 125 MAX.
 -DIMENSIONS APPLY TO FINISHED PART, BEFORE PAINTING.
 -DEBURR ALL SURFACES AND BREAK ALL EDGES.
 -TOLERANCES (+ OR -)
 DECIMAL: .XX - .03 FRACTION: 1/16
 .XXX - .010 ANGLE: 1/2 DEGREE

COATING/FINISH
 DESC: ELECTROLESS NICKEL PLATING
 SPEC: AMS 2404C (.0005 THK)
 FIRST USE
 MODEL NO 9035
 SCALE NCNE WGT

LIFT - U
 A DIVISION OF
 HOGAN MFG. INC.
 ESCALON, CALIFORNIA

REVISIONS

LTR	ECO	APPD	DATE	DESCRIPTION	DFTR	DATE	CHKR	DATE
A	2652	CL	12-07-87	RELEASED	BSA	12-07-87	CL	12-09-87
B	2728	CL	05-23-88	ADDED RADIUS IN PLACE OF SQUARE CORNER	BSA	05-23-88	CL	05-23-88
C	2850	BSA	04-26-89	REDRAWN 8 REVISED	B.B.	04-04-89	BSA	04-21-89
C	3322	JL	1-23-92	PIVOT LINK DESIGN CHANGE	AJW	L2-20-91	JL	1-23-92



2	P 153-0078	6	SLEEVE BEARING
1	C 123-0286	1	PIVOT LINK
ITEM	PART NO.	QTY	DESCRIPTION

UNLESS OTHERWISE SPECIFIED:

- INTERPRET DRAWING PER ANSI Y14, CURRENT REV.
- DIMENSIONS ARE IN INCHES.
- FINISH ALL PROCESSED SURFACES TO $\sqrt{125}$ MAX.
- DIMENSIONS APPLY TO FINISHED PART, BEFORE PAINTING.
- DEBURR ALL SURFACES AND BREAK ALL EDGES.
- TOLERANCES (+ OR -):
 DECIMAL: .XX ---- .03 FRACTION: 1/16
 .XXX ---- .010 ANGLE: 1/2 DEGREE

COATING/FINISH

DESC: NONE
SPEC: NONE

FIRST USE

MODEL NO 9035

SCALE 1 1/2" = 1" WGT —



LIFT - U
A DIVISION OF
HOGAN MFG., INC.
ESCALON, CALIFORNIA

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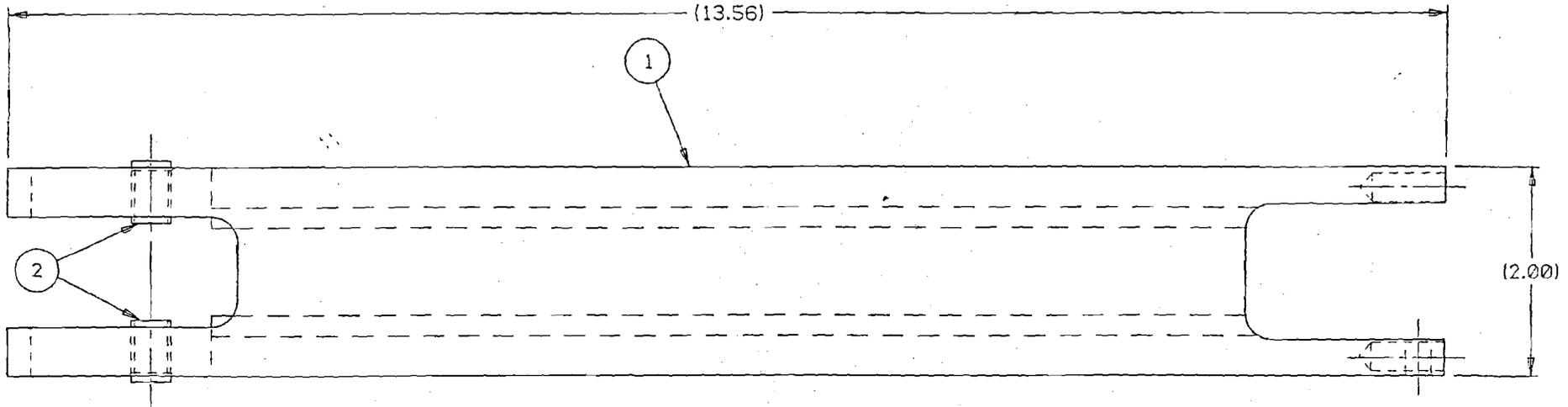
TITLE PIVOT LINK ASSEMBLY

DOC NO B 184-0041

REV D

REVISIONS

LTR	ECO	APPO	DATE	DESCRIPTION	DFTR	DATE	CHKR	DATE
A	2652	CL	12-07-87	RELEASED	BSA	12-07-97	CL	12-09-87
B	2850	BSA	04-26-89	REDRAWN & REVISED	B.B.	04-04-89	BSA	84-21-89



ITEM	PART NO.	QTY	DESCRIPTION
2	P 153-0078	2	SLEEVE BEARING
1	C 123-0289	1	SLIDE LINK

<p>UNLESS OTHERWISE SPECIFIED:</p> <p>-INTERPRET DRAWING PER ANSI Y14, CURRENT REV.</p> <p>-DIMENSIONS ARE IN INCHES.</p> <p>-FINISH ALL PROCESSED SURFACES TO $\sqrt{125}$ MAX.</p> <p>-DIMENSIONS APPLY TO FINISHED PART, BEFORE PAINTING.</p> <p>-DEBURR ALL SURFACES AND BREAK ALL EDGES.</p> <p>-TOLERANCES (+ OR -):</p> <p>DECIMAL: .XX ---- .03 FRACTION: 1/16</p> <p>.XXX --- .010 ANGLE: 1/2 DEGREE</p>	COATING/FINISH		 <p>LIFT - U</p> <p>A DIVISION OF MEC HESCALON, CALIFORNIA</p>	<p>THIS DOCUMENT IS AND CONTAINS CONFIDENTIAL TRADE SECRET INFORMATION OF THE COMPANY. NO PART OF IT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS ELECTRONICALLY, PHOTOCOPYING, RECORDING OR OTHERWISE, WITHOUT PRIOR WRITTEN PERMISSION OF HOGAN MEC, INC. THIS DOCUMENT IS LOANED FOR THE LIMITED PURPOSES STATED HEREIN ONLY, AND REMAINS THE PROPERTY OF THE COMPANY.</p>
	DESC: NONE			
	SPEC: NONE		<p>FIRST USE</p> <p>MODEL NO 9035</p>	
	SCALE 1" = 1"	WGT	DOC NO	

9/18/06

SOLID BAR LINKAGE REPORT

Review and development of a potential modification to solid bar ramp barrier linkage

1. Reasons for the review
 - 1.1 Three incidents have occurred where a passenger discovered bleeding from their big toe after they had used a lift. How and where the cut occurred was never witnessed by the passenger or others. The exact cause of the incidents has not been verified.
2. Passengers condition when the incidents occurred
 - 2.1 No feeling in the foot
 - 2.2 No control of the foot
 - 2.3 Wearing only a sock, no shoes
 - 2.4 Passengers did not have their foot on the wheelchair foot rest
 - 2.5 Discovered bleeding through the sock some time after leaving the lift and the bus had continued on its route.
 - 2.6 Required medical treatment for damage to the end of the big toe
3. Lift
 - 3.1 Incidents occurred in connection with lifts with the solid bar linkage system
 - 3.2 The solid bar linkage was on production lifts shipped from 1986 through 1996
 - 3.3 (18093) units have been shipped with this linkage system
 - 3.4 Flat bar linkage system has been used for production since 1996. Over 16781 units of this design have shipped. No reported incidents have occurred in connection with the flat bar linkage.
 - 3.5 We estimate 72,331,800 uses have occurred on the solid bar linkage system
 - 3.6 We estimate 14,871 uses per day are occurring currently with the solid bar linkage depending on how many units are still in service. Units are 10 to 20 years old.
4. Evaluation
 - 4.1 The action of the toe being cut was not observed. The bloody sock after the action made the passenger aware that the act had occurred.
 - 4.2 There were traces of blood around the linkage area so we assume it could have happened in that area.
 - 4.3 The current flat bar linkage has not experienced any incidents. In comparing the two linkages we see that the flat bar linkage has less open space under the linkage than does the solid bar linkage.
5. Testing
 - 5.1 We attempted to simulate a toe getting under the linkage
 - 5.1.1 We were unable to duplicate the incident with anyone who has control of their feet. The space under the link is 90 degrees to a person's leg and foot when in a wheelchair. The twisting required to force the toe into that space was not possible by any of our testers.

5.1.2 For a toe to be positioned under the link it must be rotated approximately 70 degrees, uncovered not in a shoe, the toe pointing down approximately 20 degrees, not on a foot rest of a wheelchair, and then forced under the link and only to the depth allowed by the size of the toe.

6. Conclusion

- 6.1 When the incident happened in 1994 the information and observations made were inconclusive. We could not confirm how the incident happened on the lift. Also this was one incident after millions of use.
- 6.2 After the second incident we revisited and still were inconclusive of what happened. At this point we began searching for possible ways to identify what could happen so we could develop a cure.
- 6.3 We have discovered that we can add a filler piece to our linkage that would reduce the space under the linkage and make the solid bar linkage similar to the flat bar linkage that has a clear history.
- 6.4 We are proposing to notify the properties that were sold lifts with solid bar links that we will supply the parts and instructions for them to rivet the part to the linkage and potentially eliminate the possibility of the solid bar linkage being the issue.

(DATE)

(OWNER NAME)
(OWNER ADDRESS)
(CITY), (STATE), (ZIP)

RE: Safety Recall Notification (Recall # 06E-093)

Dear (OWENERS NAME)

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

Lift-U has decided that a defect which relates to motor vehicle safety exists in certain platform lifts shipped from 1987 to 1996. The solid bar linkage at the ramp barrier is subject to recall.

REASON FOR THIS RECALL

Certain lift-U wheelchair lifts equipped with a solid bar barrier linkage installed as original equipment on certain vehicles owned by transit authorities and also sold as after market retrofit equipment has the possibility for a person to wedge their foot under the linkage. A person with no shoes and no control of their foot could twist their foot and get it forced under the linkage while sitting in a wheelchair which can result in cutting the end of their toe.

WHAT WE WILL DO

Lift-U will supply free of charge a closeout plate part #123-1029, a closeout assembly part #123-1032, drill template part #524-0197 and rivets along with installation instruction for these parts.

WHAT YOU SHOULD DO

You are to install the parts as instructed on drawing 123-1033. Return a copy of the "Recall Sheet" we have provided, noting when the installation of parts was completed.

Please see the attached "Recall Sheet" that lists the serial number and quantity of those lifts that were sold to you. Advise Jon Durham of the quantity of lifts still in service and he will provide the proper amount of Kits.

If you have any questions, please call Jon Durham, Lift-U'S Field Service Manager at (209-838-2400). He will work with you if you have any problems identifying the lifts affected by this recall. He will also be supplying the parts required for the recall.

If you have any additional questions, you may contact National Highway Traffic Administration by writing to the Associate Administrator for Enforcement, NHTSA NVS-200,400 Seventh Street, SW, Washington, DC 20590, or by contacting the Vehicle Safety Hotline at 1-888-327 4236, (TTY: 800-424-9153); or go to <http://www.safercar.gov>.

Thank you,

Paul Reichmuth
General Mgr.

PR/sjb

Attacxnent:

RECALL SHEET
#06E-093

OWNER _____
ADDRESS _____

RECALL DATE _____
If no longer in service, mark scrapped or sold
in completion column.
If sold provide address of new owner.

Attach additional sheets if multiple new owners.

LIFTS SUPPLIED TO (BUS CO) _____

QUANTITY _____ DATE ORDERED _____
BY BUS COMPANY

Serial Number	Recall Completion Initial	Serial Number	Recall Completion Initial	Serial Number	Recall Completion Initial
-001		-031		-061	
" -002		" -032		" -062	
" -003		" -033		" -063	
" -004		" -034		" -064	
" -005		" -035		" -065	
" -006		" -036		" -066	
" -007		" -037		" -067	
" -008		" -038		" -068	
" -009		" -039		" -069	
" -010		" -040		" -070	
" -011		" -041		" -071	
" -012		" -042		" -072	
" -013		" -043		" -073	
" -014		" -044		" -074	
" -015		" -045		" -075	
" -016		" -046		" -076	
" -017		" -047		" -077	
" -018		" -048		" -078	
" -019		" -049		" -079	
" -020		" -050		" -080	
" -021		" -051		" -081	
" -022		" -052		" -082	
" -023		" -053		" -083	
" -024		" -054		" -084	
" -025		" -055		" -085	
" -026		" -056		" -086	
" -027		" -057		" -087	
" -028		" -058		" -088	
" -029		" -059		" -089	
" -030		" -060		" -090	

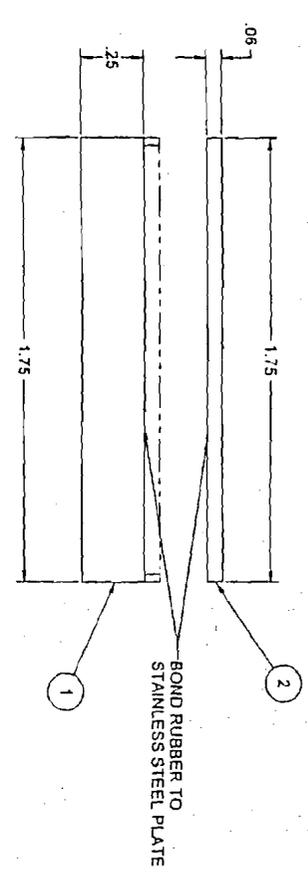
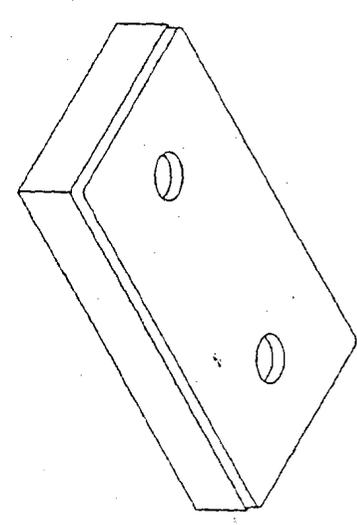
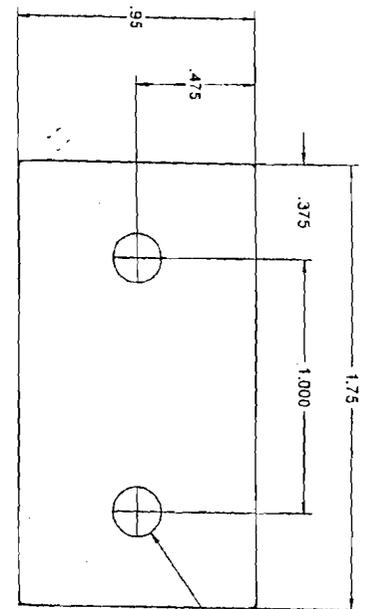
PLEASE RETURN A COPY OF THIS SHEET WITH COMPLETION INFORMATION FOR OUR REPORTING TO NHTSA – MAIL TO JON DURHAM AT LIFT-U, P.O. BOX 398, ESCALON, CA 95320.

COMPLETION DATE _____

BY _____

SIGNED

REVISIONS			
REV	DATE	BY	DESCRIPTION
1	3/25/75	DPJ	RELEASED



NOTES:
 1) ITEM 1 IS EA K NEOPRE N RUBBER DURETOMETER 3 SHORE A
 2) ITEM 2 IS 34 ST. 16 GA.

NOTE: THIS B.O.M. IS FOR REFERENCE ONLY!!!

ITEM	QTY	PART NO	DESCRIPTION
1	1	123-1032	CLOSEOUT
2	1	123-1031	BACKING PLATE

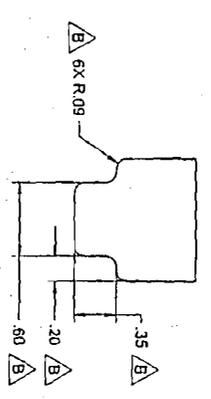
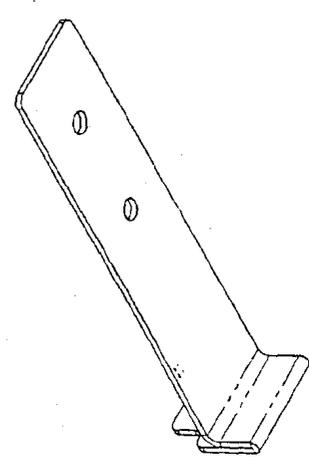
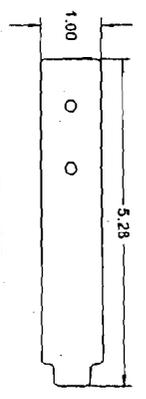
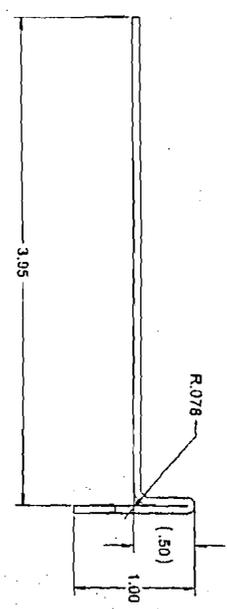
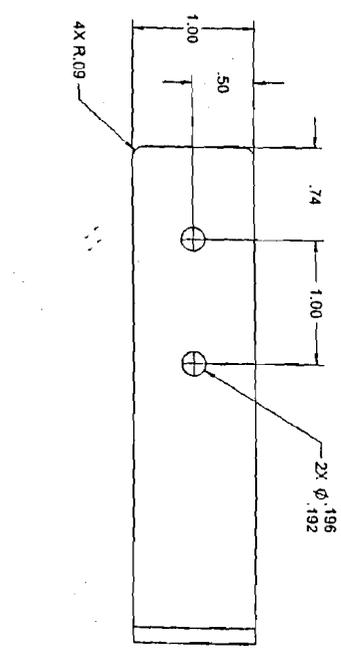
UNLESS OTHERWISE SPECIFIED:	
INTERPRET DRAWING PER ANSI Y14.5-1974.	COATING / FINISH
DIMENSIONS ARE IN INCHES.	DESC: NONE
FINISH ALL PROCESSED SURFACES TO 725 RING HUE.	SPEC: NONE
REMOVE ALL BURRS AND SHARP EDGES BY HAND OR MACHINE.	FIRST USE REFERENCE:
DEBurr ALL SURFACES AND BREAK ALL SQUARE CORNERS TO R0.015"	
TOLERANCES: ± OR ±	
DECIMAL: .0005	FRACTION: 1/16
XX ± .03	ANGLE: 1/2 DEGREE
XXX ± .0005	

TITLE	SCALE	WEIGHT	DOCUMENT NO.	SHEET NO.	REVISION
CLOSEOUT ASSEMBLY	4:1	0.1406	123-1032	1 OF 1	A



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REVISIONS					
LT#	ECO	DATE	DESCRIPTION	DATE	BY
A			RELEASED	11/02/2008	DPJ
B			ADDED FLANGE PROFILE	07/14/2008	DPJ



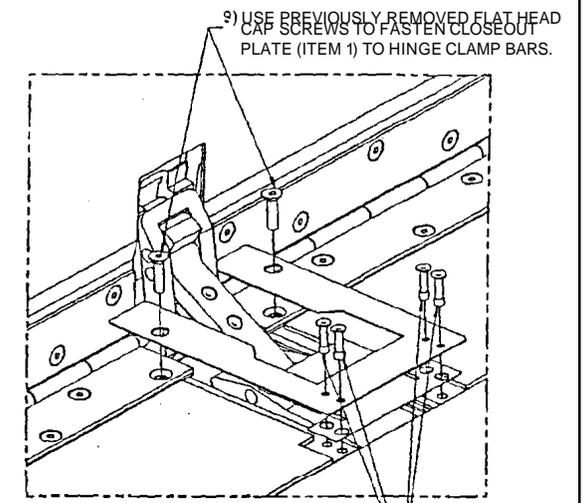
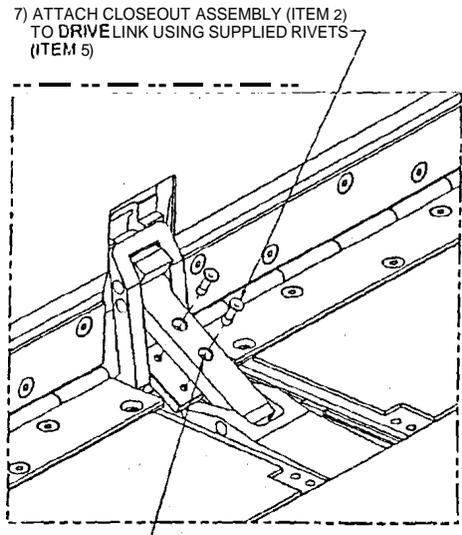
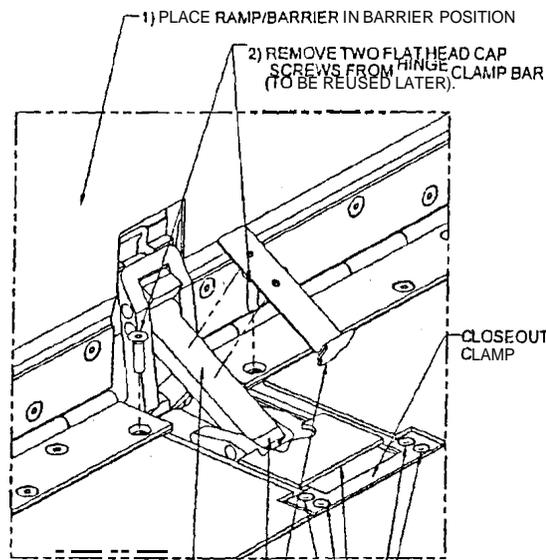
UNLESS OTHERWISE SPECIFIED:		COATING / FINISH		TITLE	
MATERIALS SHALL BE AS SPECIFIED IN THE DRAWING.		DESC: NONE		DRILL TEMPLATE	
FINISH ALL PROCESSED SURFACES TO 1/32" RAU MAX.		SPEC: NONE		HOGAN MFG., INC.	
DIMENSIONS APPLY TO FINISHED PART BEFORE FINISHING.		FIRST USE REFERENCE:		A DIVISION OF	
CHAMFER ALL SURFACES AND BREAK ALL EDGES .015 ± .01.		SCALE: 2:1		DOCUMENT NO: 524-0197	
TOLERANCES: .001		WEIGHT: 0.0859		SHEET NO: 1 OF 1	
DECIMAL: .001		ANGLE: IN DEGREES		REVISION: B	
XXX * .005					



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SST SH 16 GA X 1.00 X (.528) 1304
DESCRIPTION SPEC

REVISIONS									
LT#	ECO	APPR	DATE	RELEASED	DESCRIPTION	OPFR	DATE	CHKR	DATE
A						SG	3/21/2008		
B					MODIFIED NOTE # ACCOED ITEM 6	CPJ	8/13/2008		6/13/09



- 5) MARK LOCATION AND DRILL TWO Ø 201 (#7 DRILL) HOLES THROUGH LINK.
- 4) PLACE DRILL TEMPLATE FLANGE (524-0197) AGAINST DRIVE LINK AND CLAMP TOGETHER. HOLES TO BE ON CENTERLINE OF DRIVE LINK.
- 3) REMOVE FOUR RIVETS. CLOSEOUT FLAP AND CLOSEOUT CLAMP. CLOSEOUT CLAMP WILL NOT BE REUSED AND MAY BE DISCARDED.

-USE AS REQUIRED-

ITEM	QTY	PART NO	DESCRIPTION
1	1	123-1029	CLOSEOUT PLATE
2	1	123-1032	CLOSEOUT ASSEMBLY
3	1	524-0197	DRILL TEMPLATE
4	4	440-0040	SSST BLIND RIVET; DOME HD, 3/16", .501-.825 GRIP
5	2	4406003	SSST BLIND RIVET; DOME HD, 3/16", .376-.500 GRIP
6	4	429-0043	FLAT WASHER; .438" OD, .203" ID, .073" M.K. SST

UNLESS OTHERWISE SPECIFIED:		COATING/FINISH	
DESC: NONE		DESC: NONE	
SPEC: NONE		SPEC: NONE	
FIRST USE REFERENCE:		FIRST USE REFERENCE:	
LUO		LUO	
SCALE: 1:8		SCALE: 1:8	
WEIGHT: 181.6978		WEIGHT: 181.6978	

LET LIFT-U
SCALE: 800/719 5120
 206-818-1400

A DIVISION OF
HOGAN MFG., INC.

TITLE
LINKAGE CLOSEOUT KIT

DOCUMENT NO. **123-1033**

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LIFT-U
DIVISION OF HOGAN MFG.
P. O. BOX 398
ESCALON, CALIF. 95320

SAFETY RECALL NOTICE

OWNER NAME

OWNER ADDRESS

(CITY), (STATE) (ZIP)



REC'D JAN 15 2007

U.S. Department
of Transportation

400 Seventh Street, SW
Washington, DC 20590

**National Highway
Traffic Safety
Administration**

NOV 20 2006

MR. PAUL REICHMUTH
GENERAL MANAGER
LIFT-U
P.O. BOX 398
ESCALON, CA 95320-0398

NVS-215kjs
06E-093

Subject: WHEELCHAIR LIFTS

Dear MR. REICHMUTH:

This letter is to acknowledge your recent defect information report. Please review the following information to ensure that it conforms to your records as this information is being made available to the public. If the information does not agree with your records, please contact us immediately to discuss your concerns.

Makes/Models/Model Years:
LIFT-U/WHEELCHAIR LIFT/9999

NHTSA Campaign Number: 06E-093

Mfg's Report Date: October 18,2006

Components:
EQUIPMENT ADAPTIVE

Potential Number of Units Affected: 18,093

Summary:
CERTAIN LIFT-U WHEELCHAIR LIFTS EQUIPPED WITH A SOLID BAR BARRIER LINKAGE INSTALLED AS ORIGINAL EQUIPMENT ON CERTAIN SPECIALTY VEHICLES OWNER BY STATE TRANSIT AUTHORITIES AND ALSO SOLD AS AFTERMARKET RETROFIT EQUIPMENT. THE PART NUMBERS WHICH MAKE UP THE SOLID BAR LINKAGE ARE: 184-0042, 184-0041, 123-0288, AND 123-0287. IT IS POSSIBLE FOR A PERSON TO WEDGE THEIR FEET UNDER THE LINKAGE.

Consequence:
IT IS POSSIBLE THAT A PERSON WITH NO SHOES, NO CONTROL OF THEIR FOOT COULD TWIST THEIR FOOT AND GET IT FORCED UNDER THE LINKAGE WHILE SETTING IN A WHEEL CHAIR WHICH COULD RESULT IN A CUT.

Remedy:

THE VEHICLE MANUFACTURERS WILL NOTIFY OWNERS TO CONTACT LIFT-U FOR A FREE REPAIR KIT ALONG WITH INSTALLATION INSTRUCTIONS. LIFT-U WILL NOTIFY OWNERS WHO HAVE PURCHASED THE SUBJECT LIFTS AS AFTERMARKET EQUIPMENT. THE RECALL IS EXPECTED TO BEGIN DURING DECEMBER 2006. OWNERS MAY CONTACT LIFT-U AT 209-838-2400.

Notes:

CUSTOMERS MAY CONTACT THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION'S VEHICLE SAFETY HOTLINE AT 1-888-327-4236 (TTY: 1-800-424-9153); OR GO TO [HTTP://WWW.SAFERCAR.GOV](http://www.safercar.gov).

Please provide the following additional information and be reminded of the following requirements:

You are required to submit a draft owner notification letter to this office no less than five days prior to mailing it to the customers. Also, copies of all notices, bulletins, dealer notifications, and other communications that relate to this recall, including a copy of the final owner notification letter and any subsequent owner follow-up notification letter(s), are to be submitted to this office no later than 5 days after they are originally sent (if they are sent to more than one manufacturer, distributor, dealer, or purchaser/owner).

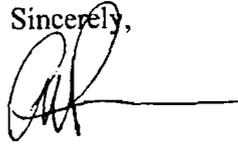
Lift-U must file a sample of the envelope which you intend to use to mail the recall notice to owners. The words "SAFETY", "RECALL", "NOTICE" in any order must be printed on the envelope in larger font than the customers name and address.

Notification to owners as required by 49 CFR Part 577 must be sent by the vehicle manufacturer(s). If Lift-U intends to perform the remedy repairs on behalf of the vehicle manufacturer(s) and file the quarterly recall completion reports required by 49 CFR 573.7, it must file these reports separately for each vehicle manufacturer. If the recall is not successful, follow-up notification by the vehicle manufacturer(s) maybe required.

As stated in Part 573.7, submission of the first of six consecutive quarterly status reports is required within one month after the close of the calendar quarter in which notification to purchasers occurs. As stated in your report, the recall is expected to begin during December 2006. Therefore, the first quarterly report will be due in this office on or before 30 days after the close of the calendar quarter.

Your contact for this recall will be Kelly Schuler, who may be reached by phone at 202-366-5227 or by **email** at Kelly.schuler@dot.gov. We look forward to working with you for successful completion of this recall campaign.

Sincerely,

A handwritten signature in black ink, appearing to be 'G. Person', followed by a horizontal line extending to the right.

George H. Person
Chief, Recall Management Division
Office of Defects Investigation
Enforcement