



09V-368
(23 pages)

Post Office Box 3008
Hayward, CA 94540-3008

(510) 785-1500

September 23, 2009

Mr. George Person
Chief, Recall Management Division
Office of Defects Investigation
National Highway Traffic Safety Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: Gillig Safety Recall – Luminator Horizon LED Side Sign

Dear Mr. Person:

This letter is written to inform you of Gillig's intention to notify customers of a safety defect related to the Luminator Horizon LED Side Signs installed on Gillig buses manufactured from 2001 – 2009. The recall affects 1053 buses.

Luminator discovered the defect which relates to the Connector Board Assembly and notified Gillig on September 17, 2009.

Attached is Gillig's 573 report. If you have any questions, please give me a call at 510-264-5037 or E-Mail greg.vismara@gillig.com

Sincerely,

GILLIG LLC

Gregory J. Vismara
Vice President Engineering

Cc. Robert Birdwell
Steven R. Enochian

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2009 SEP 28 A 9:55
OFFICE OF DEFECTS
INVESTIGATION

Safety Defect and Noncompliance Report Guide for Vehicles
Part 573 Defect and Noncompliance Responsibility and Reports

On September 17, 2009, Gillig LLC decided that a defect which relates to motor vehicle safety 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 Responsibility and Reports.

Date this report was prepared: September 23, 2009

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 LLC
25800 Clawiter Road
Hayward, Ca 94545

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

Gregory J. Vismara
Vice President
Telephone number: 510-264-5037 Fax Number: 510-264-3897

Name and Title of Person who prepared this report:

Gregory J Vismara
Vice President

Signed: 

I. Identify the Vehicle Models Involved in the Recall

2. Identify the Vehicles Involved in the Recall:

Make(s): Gillig LLC Model Years Involved: 2001-2009 Model(s): Phantom, Lowfloor

Production Dates: Beginning: January 2001 Ending: September 2009

VIN Range: Beginning: 90413 Ending: 176985 (not sequential)

Vehicle Type: Transit Bus Body style: Phantom, Lowfloor

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

Effected Vehicles are equipped with 1) one Luminator Horizon side sign and no rear route sign or 2) two Horizon side signs.

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. 9.6%

II. Identify 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	2001-2009	274
Lowfloor	2001-2009	779

Total Number Potentially Affected by the Recall: 1053

4. Furnish the approximate percentage of the total number of vehicles estimated to actually contain the defect or noncompliance: Refer to 09E-054 (Luminator 573 draft attached)

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:

Effected part numbers provided by Luminator. Bus serial numbers these part numbers were installed on were identified through the Gillig Bill of Material History files.

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 non-compliance. Illustrations should be provided as appropriate.

Refer to 09E-054 (Luminator 573 draft attached)

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

Refer to 09E-054 (Luminator 573 draft attached)

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

Refer to 09E-054 (Luminator 573 draft attached)

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

Refer to 09E-054 (Luminator 573 draft attached)

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

Luminator Holding LP

900 Klein Road

Plano, TX 75074

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

David Major, Controller

IV. Provide the Chronology in Determining the Defect/Noncompliance

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.

Refer to 09E-054 (Luminator 573 draft 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.

N/A

V. Identify the Remedy

8. A description of the manufacturer's program for remedying the defect or noncompliance. This program shall include a plan for reimbursing and owner or purchaser who incurred costs to obtain a remedy for the problem addressed by the recall within a reasonable time in advance of the manufacturer's notification of owners, purchasers and dealers, in accordance with §573.13 of this part.

Refer to 09E-054 (Luminator 573 draft attached)

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

Refer to 09E-054 (Luminator 573 draft attached)

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

Refer to 09E-054 (Luminator 573 draft attached)

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.

Refer to 09E-054 (Luminator 573 draft attached)

VI. Identify the Recall Schedule

10. 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.

Refer to 09E-054 (Luminator 573 draft attached)

VII. Furnish Recall Communications

11. 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) or by E-Mail to RMD.ODI@dot.gov for review prior to mailing.*

Note that these documents are to be submitted separately from those provided in accordance with Part 579.5 requirements.

Serial Number	Customer	QTY Of Buses In Fleet
B176819	(BUILT)AKRON,OH 176819-22/G27D102N4	4
B076832	(BUILT)AKRON,OH 76832-840/G29D102N4	9
B077056	(BUILT)AKRON,OH 77056-60/G29B102N4	5
B078263	(BUILT)AKRON,OH 78263-78264/G29B102N4	2
B078891	(BUILT)AKRON,OH 78891-92/G27B102N4	2
B077115	(BUILT)ALLENTOWN,PA 77115-118/G29B102N4	4
B077119	(BUILT)ALLENTOWN,PA 77119-122/G29D102N4	4
B073501	(BUILT)ANN ARBOR,MI 73501-505/G20B102N4	5
B073506	(BUILT)ANN ARBOR,MI 73506/G20D102N4	1
B073507	(BUILT)ANN ARBOR,MI 73507-519/G20D102N4	13
B078365	(BUILT)ANN ARBOR,MI 78365-79/G30D012N4	15
B078380	(BUILT)ANN ARBOR,MI 78380-84/G30D102N4	5
B111963	(BUILT)ARCATA,CA 111963-964/C21B102N4	2
B091153	(BUILT)ATTLEBORO,MA 91153/G29E102R2	1
B091154	(BUILT)ATTLEBORO,MA 91154-58/G29E102R2	5
B091292	(BUILT)ATTLEBORO,MA 91292-93/G30E102N2	2
B112328	(BUILT)AVON,CO 112328/C21B096N4	1
B077578	(BUILT)AVON,CO 77578/G27B102N4	1
B077855	(BUILT)AVON,CO 77855/G27B102N4	1
B077856	(BUILT)AVON,CO 77856/G30B102N4	1
B073560	(BUILT)BATON ROUGE,LA 73560-561/G	2
B073562	(BUILT)BATON ROUGE,LA 73562/G18B102N4	1
B073563	(BUILT)BATON ROUGE,LA 73563/G18B102N4	1
B079690	(BUILT)BEAVER CREEK,CO 79690-91/G27D10	2
B112147	(BUILT)BILLINGS,MT 112147-51/C21B102N4	5
B112081	(BUILT)BILLINGS,MT 112081-86/C20B012N4	6
B112795	(BUILT)BILLINGS,MT 112795-99/C21B102N4	5
B112873	(BUILT)BILLINGS,MT 112873/C21B102N4	1
B176407	(BUILT)BURLINGTON,VT 176407/G27B102N4	1
B079379	(BUILT)BURLINGTON,VT 79379/G27B102N4	1
B090840	(BUILT)CANTON,OH 90840-844/G29E102R2	5
B091397	(BUILT)CANTON,OH 91397-400/G27E102N2	4
B091119	(BUILT)CENTRALIA,WA 91119-20/G29E102R2	2
B176979	(BUILT)CHARLESTON,WV 176979-80/G30B102	2
B112017	(BUILT)CHARLESTON,WV 112017-24/C21A096N	8
B112457	(BUILT)CHARLESTON,WV 112457/C21B096N4	1
B112458	(BUILT)CHARLESTON,WV 112458-73/C21B096N	16
B112244	(BUILT)CHICO,CA 112244-249/C20B102N4	6
B111946	(BUILT)CLARKSVILLE,TN 111946-49/C20A096	4
B112102	(BUILT)CLARKSVILLE,TN 112102-105/C20A09	4
B112419	(BUILT)CLARKSVILLE,TN 112419-21/C29A096	3
B078198	(BUILT)COLUMBIA,MO 78198-99/G27D102N4	2
B073397	(BUILT)DAVENPORT,IA 73397-402/G29B102N4	6
B090760	(BUILT)DAVENPORT,IA 90760-764/G18E102R2	5
B091748	(BUILT)DECATUR,IL 91748-52/G27E102N2 *	5

Serial Number	Customer	QTY Of Buses In Fleet
B074376	(BUILT)DULUTH,MN 74376/G29B102N4	1
B074377	(BUILT)DULUTH,MN 74377-385/G29B102N4	9
B090589	(BUILT)DULUTH,MN 90589-598/G18E102R2	10
B112043	(BUILT)EAGLE COUNTY,CO 112043/C21D102N	1
B112100	(BUILT)EAGLE COUNTY,CO 112100-01/C21D10	2
B112289	(BUILT)EAGLE COUNTY,CO 112289/C21D102N4	1
B076908	(BUILT)EDEN PRAIRIE,MN 76908-17/G29D102	10
B112213	(BUILT)EPHRATA,WA 112213-4/C29A096N4	2
B077688	(BUILT)EPHRATA,WA 77688-91/G29B102N4	4
B091233	(BUILT)EPHRATA,WA 91233-34/G29E102R4	2
B111986	(BUILT)EUREKA,CA 111986/C21B102N4	1
B077692	(BUILT)EUREKA,CA 77692-93/G19B102N4	2
B091159	(BUILT)EVANSVILLE,IN 91159-62/G19E102R2	4
B091461	(BUILT)EVANSVILLE,IN 91461/G30E102N2	1
B076385	(BUILT)FAIRBANKS,AK 76385-88/G27B102N	4
B091023	(BUILT)FAIRBANKS,AK 91023-28/G27E102R	6
B176011	(BUILT)FAIRFAX,VA 176011-16/G30B102N4	6
B112346	(BUILT)FAIRFAX,VA 112346-51/C27A096N4	6
B090680	(BUILT)FARGO,ND 90680-83/G29E102R2	4
B078245	(BUILT)GARY,IN 78245-49/G27B102N4	5
B078250	(BUILT)GARY,IN 78250-51/G27D102N4	2
B078252	(BUILT)GARY,IN 78252/G21D102N4	1
B090574	(BUILT)GRAND FORKS,ND 90574/G22E102R2	1
B090925	(BUILT)GRAND FORKS,ND 90925/G29E102R2	1
B077430	(BUILT)GRAYS HARBOR,WA 77430-32/G29B102	3
B112079	(BUILT)GREENFIELD,MA 112079-80/C29A096N	2
B176605	(BUILT)HAVERHILL,MA 176605-06/G30B102N	2
B177646	(BUILT)HAVERHILL,MA 177646-52/G27B102N	7
B112513	(BUILT)HAVERHILL,MA 112513-529/C21B096N	17
B078159	(BUILT)HAVERHILL,MA 78159-61,G21B102N4	3
B112492	(BUILT)HILO,HI 112492-494/C29D102N4	3
B112534	(BUILT)HILO,HI 112534-38/C21D102N4	5
B091667	(BUILT)HOT SPRINGS,AR 91667/G27E102N2	1
B077439	(BUILT)HUMBOLDT COUNTY,CA 77439-41/G19D	3
B111711	(BUILT)HUMBOLDT,CA 111711-2/C21D102N	2
B111729	(BUILT)HUMBOLDT,CA 111729/C21D102N4	1
B111730	(BUILT)HUMBOLDT,CA 111730/C21D102N4	1
B112001	(BUILT)HUNTINGTON,NY 112001-007/C20A096	7
B073747	(BUILT)HUNTINGTON,WV 73747-748/G27B102N	2
B073749	(BUILT)HUNTINGTON,WV 73749/G27B102N4	1
B090652	(BUILT)HUNTINGTON,WV 90652-657/G20E102R	6
B091229	(BUILT)HUNTINGTON,WV 91229-32/G29E102R2	4
B078999	(BUILT)IRONTON,OH 78999-79000/G27B102N	2
B112208	(BUILT)ISLAND TRANSIT 112208-09/C20B096	2
B079441	(BUILT)ISLAND TRANSIT,WA 79441-42/G21D	2

Serial Number	Customer	QTY Of Buses In Fleet
B112850	(BUILT)ISLAND TRANSIT,WA 112850-54/C21D	5
B111645	(BUILT)JOHNSONBURG,PA 111645-648/C29B10	4
B090105	(BUILT)JOHNSONBURG,PA 90105-110/G29E102	6
B073655	(BUILT)KALAMAZOO,MI 73655-659/G27B102	5
B078442	(BUILT)KALAMAZOO,MI 78442-48/G27B102N4	7
B076681	(BUILT)KALAMAZOO,MI 76681-84/G29D102N4	4
B078438	(BUILT)KALAMAZOO,MI 78438-41/G27B102N4	4
B078831	(BUILT)KEY WEST,FL 78831-32/G27B102N4	2
B090684	(BUILT)KEY WEST,FL 90684-690/G18E102R2	7
B111596	(BUILT)LAKELAND,FL 111596-603/C20B096N4	8
B112146	(BUILT)LAKELAND,FL 112146/C21B096N4	1
B112756	(BUILT)LAKELAND,FL 112756-59/C21B096N4	4
B112801	(BUILT)LAKELAND,FL 112801-05/C21B096N4	5
B079938	(BUILT)LANCASTER,PA 79938/G27B102N4	1
B091548	(BUILT)LANCASTER,PA 91548-49/G27E102N2	2
B077773	(BUILT)LANCASTER,PA 77773-78/G29B102N4	6
B091263	(BUILT)LANCASTER,PA 91263-64/G29E102R2	2
B079501	(BUILT)LAS CRUCES,NM 79501-04/G27B102N	4
B072862	(BUILT)LAS CRUCES,NM 72862-69/G29B102N4	8
B074401	(BUILT)LOGAN,UT 74401-2/G29B102N4	2
B076664	(BUILT)LOGAN,UT 76664-66/G29B102N4	3
B078059	(BUILT)LOGAN,UT 78059-63/G29B102N4	5
B111753	(BUILT)LONG BEACH,NY 111753-56/C20A096N	4
B111757	(BUILT)LONG BEACH,NY 111757-59/C20A096N	3
B112206	(BUILT)LONGVIEW,WA 112206-207/C21B096N4	2
B079321	(BUILT)LOWELL,MA 79321-26/G27B102N4	6
B079327	(BUILT)LOWELL,MA 79327-28/G30B102N4	2
B077534	(BUILT)LOWELL,MA 77534-40/G29B102N4	7
B078200	(BUILT)LOWELL,MA 78200-204/G27B012N4	5
B090964	(BUILT)LOWELL,MA 90964-71/G29E102R2	8
B091100	(BUILT)LOWELL,MA 91100-03/G29E102R2	4
B091121	(BUILT)LOWELL,MA 91121/G29E102R2	1
B073741	(BUILT)MACOMB,IL 73741-743/G29B102N4	3
B073744	(BUILT)MACOMB,IL 73744-746/G29D102N4	3
B176572	(BUILT)MANKATO,MN 176572/G27D102N4	1
B091629	(BUILT)MEADVILLE,PA 91629-31/G27E102N2	4
B091632	(BUILT)MEADVILLE,PA 91632/G27E102N2	1
B112096	(BUILT)MERCED COUNTY,CA 112096-099/C20B	4
B112910	(BUILT)MODESTO,CA 112910-14/C21D102N4	5
B091437	(BUILT)MONROE,MI 91437-39/G30E102N2	3
B078554	(BUILT)MUSKEGON,MI 78554-58/G27B102N4	5
B076851	(BUILT)MUSKEGON,MI 76851-54/G29B102N4	4
B091092	(BUILT)NAPLES,FL 91092-94/G29E102R2	3
B091164	(BUILT)NAPLES,FL 91164-167/G29E102R2	4
B091586	(BUILT)NAPLES,FL 91586-89/G27E102N2	4

Serial Number	Customer	QTY Of Buses In Fleet
B076163	(BUILT)NASHUA,NH 76163/G21B102N4	1
B090709	(BUILT)NEW CASTLE,PA 90709-11/G	3
B079700	(BUILT)NEW CASTLE,PA 79700-01/G21D102N	2
b091624	(BUILT)NEW CASTLE,PA 91624-25/G27E102N	2
B110880	(BUILT)NEW CASTLE,PA 110880/C21D102N4	1
B077547	(BUILT)NORTH LITTLE ROCK,AK 77547/G29B1	1
B073455	(BUILT)NORTH LITTLE ROCK,AR 73455-463/G	9
B077542	(BUILT)NORTH LITTLE ROCK,AR 77542-46/G2	5
B079584	(BUILT)NORTH LITTLE ROCK,AR 79584-88/G2	5
B079589	(BUILT)NORTH LITTLE ROCK,AR 79589-93/G2	5
B111844	(BUILT)OHIO STATE UNIV 111844-49/C	6
B111766	(BUILT)OHIO STATE UNIV,OH 111766-771/C2	6
B112422	(BUILT)ONEONTA,NY 112422-425/C20B096N4	4
B112426	(BUILT)ONEONTA,NY 112426-427/C20B096N4	2
B112428	(BUILT)ONEONTA,NY 112428/C20B096N4	1
B112429	(BUILT)ONEONTA,NY 112429/C20B096N4	1
B112769	(BUILT)ONEONTA,NY 112769-72/C21B096N4	4
B091668	(BUILT)OWENSBORO,KY 91668/G27E102N2	1
B090555	(BUILT)PADUCAH,KY 90555/G27E102R2	1
B090600	(BUILT)PADUCAH,KY 90600-602/G27E102R2	3
B074464	(BUILT)PARK CITY,UT 74464-67/G	1
B074350	(BUILT)PARK CITY,UT 74350-53/G29B102N	4
B072237	(BUILT)PARK CITY,UT 72237-240/G22B102N4	4
B076502	(BUILT)PARK CITY,UT 76502-08/G29B102N4	7
B091265	(BUILT)PETERSBURG,VA 91265-73/G29E102R2	9
B112210	(BUILT)PORT ANGELES 112210-11/C21D096N4	2
B111982	(BUILT)PORT ANGELES,WA 111982/C21D102N	1
B111156	(BUILT)PORT ANGELES,WA 111156-57/C20A09	2
B177004	(BUILT)READING,PA 177004-08/G30D102N4	5
B079717	(BUILT)READING,PA 79717-22/G27B102N4	6
B079723	(BUILT)READING,PA 79723-24/G27D102N4	2
B076744	(BUILT)READING,PA 76744/G29B102N4	1
B076745	(BUILT)READING,PA 76745-60/G29B102N4	16
B077700	(BUILT)READING,PA 77700-6/G29B102N4	7
B071892	(BUILT)READING,PA.71892-3/G20D012N4	2
B176198	(BUILT)SANDY,OR 176198-99/G21B102N4	2
B112212	(BUILT)SHELTON,WA 112212/C21A096N4	1
B112652	(BUILT)SHELTON,WA 112652/C21B096N4	1
B112655	(BUILT)SHELTON,WA 112655-56/C21D102N4	2
B077859	(BUILT)SHELTON,WA 77859-61/G21B102N4	3
B073135	(BUILT)SIOUX CITY,IA 73135-37/G29B10	3
B073131	(BUILT)SIOUX CITY,IA 73131-134/G29B102N	4
B076418	(BUILT)SIOUX CITY,IA 76418/G29B102N4	1
B077098	(BUILT)SIOUX CITY,IA 77098/G29B102N4	1
B112900	(BUILT)SOUND-COMMUNITY,WA 112900-09/C27	10

Serial Number	Customer	QTY Of Buses In Fleet
B073078	(BUILT)SOUTH BEND,IN 73078-087/G	10
B074144	(BUILT)SOUTH BEND,IN 74144-153/G29B10	10
B072584	(BUILT)SOUTH BEND,IN 72584-593/G27B102N	10
B074133	(BUILT)SOUTH BEND,IN 74133-143/G29B102N	11
B090732	(BUILT)SPRINGFIELD,OH 90732-36/G29E102R	5
B079894	(BUILT)ST. LOUIS,MO 79894/G27B102N4	1
B079895	(BUILT)ST. LOUIS,MO 79895-79910/G27B10	16
B079911	(BUILT)ST. LOUIS,MO 79911-79914/G27B10	4
B079915	(BUILT)ST. LOUIS,MO 79915-19/G27B102N4	5
B073100	(BUILT)ST.CLOUD,MN 73100-104/G27B102N4	5
B090714	(BUILT)ST.JOSEPH,MO 90714-720/G29E102R	7
B090569	(BUILT)ST.JOSEPH,MO 90569-573/G18E102R2	5
B090932	(BUILT)ST.JOSEPH,MO 90932-37/G29E102R2	6
B176538	(BUILT)ST.LOUIS,MO 176538-41/G27D102N4	4
B111605	(BUILT)ST.LOUIS,MO 111605-34/C21D102N4	30
B112498	(BUILT)ST.LOUIS,MO 112498-512/C21D102N4	15
B176687	(BUILT)STANFORD UNIV,CA 176687-88/G30B	2
B110852	(BUILT)STEAMBOAT SPGS,CO 110852-856/C21	5
B091666	(BUILT)STEAMBOAT SPRINGS,CO 91666/G30E	1
B091258	(BUILT)TAMPA,FL 91258-62/G29E102R2	5
B076490	(BUILT)TAMPA,FL 76490-501/G21D102N4	12
B076885	(BUILT)TAMPA,FL 76885-92/G21D102N4	8
B076893	(BUILT)TAMPA,FL 76893-96/G21D102N4	4
B090670	(BUILT)TWIN CITIES,MN 90670-672/G18E102	3
B090673	(BUILT)TWIN CITIES,MN 90673-677/G18E102	5
B090926	(BUILT)TWIN CITIES,MN 90926-27/G29E102R	2
B090928	(BUILT)TWIN CITIES,MN 90928-31/G29E102R	4
B112070	(BUILT)U OF ARKANSAS,AR 112070/C21B096N	1
B073019	(BUILT)U OF MICHIGAN 73019-20/G18D102N4	2
B073021	(BUILT)U OF MICHIGAN 73021-24/G18D102N4	4
B074237	(BUILT)U OF MICHIGAN 74237-44/G29D102N4	8
B076343	(BUILT)U OF MICHIGAN,MI 76343/G29D102N	1
B076338	(BUILT)U OF MICHIGAN,MI 76338-42/G29D10	5
B074079	(BUILT)U OF MINNESOTA 74079-82/G22D102N	4
B112823	(BUILT)UC DAVIS MED CENTER,CA 112823/	1
B112242	(BUILT)UC DAVIS MED CTR,112242-43/	2
B176823	(BUILT)UNIV OF KANSAS,KS 176823-26/G27	4
B079443	(BUILT)UNIV OF KANSAS,KS 79443-47/G27D1	5
B077746	(BUILT)UNIV OF MARYLAND,MD 77746-47/G21	2
B077748	(BUILT)UNIV OF MARYLAND,MD 77748/	1
B078038	(BUILT)UNIV of MICHIGAN,MI 78038-43/ G2	6
B078893	(BUILT)UNIV of MICHIGAN,MI 78893-95/G27	3
B176189	(BUILT)UNIV OF MINNESOTA,MN 176189/G30	1
B077086	(BUILT)UNIV. OF WISCONSIN,WI 77086-87/G	2
B112773	(BUILT)VAIL,CO 112773-78/C21B096N4	6

Serial Number	Customer	QTY Of Buses In Fleet
B076514	(BUILT)VAIL,CO 76514/G19D102N4	1
B079431	(BUILT)VAIL,CO 79431/G30D102N4	1
B079432	(BUILT)VAIL,CO 79432-37/G30D102N4	6
B090987	(BUILT)WALLA WALLA,WA 90987-91/G29E102R	5
B091011	(BUILT)WALLA WALLA,WA 91011-12/G29E102R	2
B091021	(BUILT)WALLA WALLA,WA 91021-22/G29E102R	2
B176953	(BUILT)WATERLOO,IA 176953/G27B102N4	1
B091685	(BUILT)WATERLOO,IA 91685-86/G27E102N2	2
B072855	(BUILT)WAUKESHA,WI 72855-861/G29B10	7
B079493	(BUILT)WAUKESHA,WI 79493-95/G27B102N4	3
B112025	(BUILT)WICHITA,KS 112025-26/C29B096N4	2
B112579	(BUILT)WICHITA,KS 112579-82/C29D096N4	4
B078667	(BUILT)WILDER,VT 78667-69/G27B102N4	3
B073695	(BUILT)WILDER,VT 73695-702/G29B102N4	8
B076532	(BUILT)WILLIAMSPORT 76532-34/G29B102N4	3
B076535	(BUILT)WILLIAMSPORT 76535-36/G29D102N4	2
B078153	(BUILT)WILLIAMSPORT,PA 78153/G27D102N4	1
B079507	(BUILT)WILLIAMSPORT,PA 79507-08/G27B10	2
B076581	(BUILT)WILLIAMSPORT,PA 76581/G29D102N4	1
B110881	(BUILT)WINTER HAVEN,FL 110881/C20A096N4	1
B112095	(BUILT)WINTER HAVEN,FL 112095/C20A096N4	1
B111364	(BUILT)WINTER HAVEN,FL111364-65/C20A096	2
B075050	(BUILT)YOUNGSTOWN,OH 75050-56/G20B102N4	7
B176971	CHARLESTON,WV 176971-78/G27B102N4	8
B176173	CANTON,OH 176173-74/G30D102N4	2
B091753	CHARLESTON,WV 91753-54/G27E102N2	2
B091755	CHARLESTON,WV 91755-56/G30E102N2	2
B177325	READING,PA 177325-26/G27D102N4	2
B091821	CANTON,OH 91821/G30E102N4	1
B091757	HUNTINGTON,WV 91757-65/G27E102N2	9
B177221	ROCKFORD,IL 177221-33/G27B102N4	13
B176019	EUREKA,CA 176019-21/G27B102N4	3
B176981	HUNTINGTON,WV 176981-82/G27B102N4	2
B177352	ARCATA,CA 177352-53/G27B102N4	2
B176983	HUNTINGTON,WV 176983-85/G30B102N4	3

Total buses 1053

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

On August , 31, 2009 Luminator Holding, LP decided that a defect which relates to motor vehicle safety 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: September 11, 2009

Furnish the manufacturer's identification code for this recall (if applicable): CAGE Code 17744

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.

Luminator Holding, LP, 900 Klein Road, Plano, TX 75074

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

David Major, Controller

Telephone Number: 972-516-3033 Fax No.: 972-423-1540

Name and Title of Person who prepared this report.

Eric Marquet
Director of Quality Assurance

Signed:  _____

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:

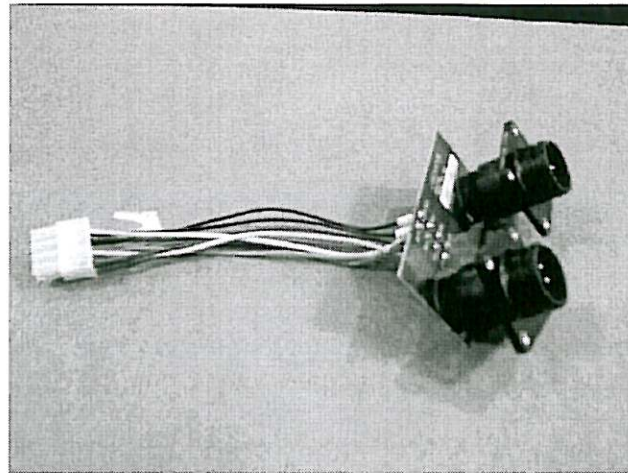
Make: Luminator Model: Horizon LED Side Destination Sign, PWA Connector

Part Number: 506746(-001), (-002), (-004) Size: NA

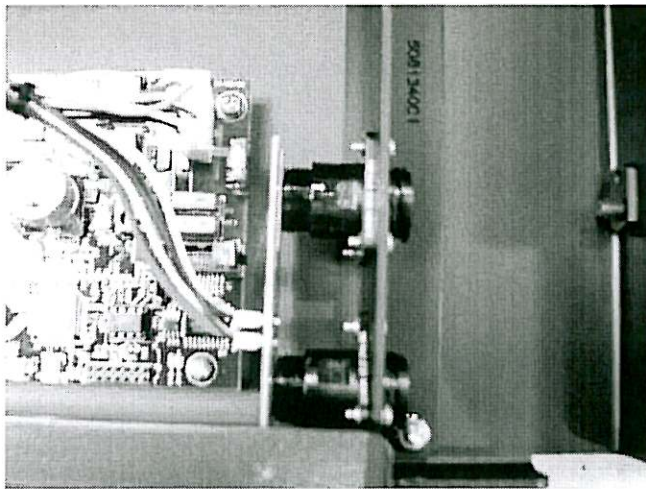
Function: The connector board allows the sign system interconnecting cables to attach to the sign and provide power, ground and communications from the bus to the side destination sign.

Model Years Involved: 2001-2009

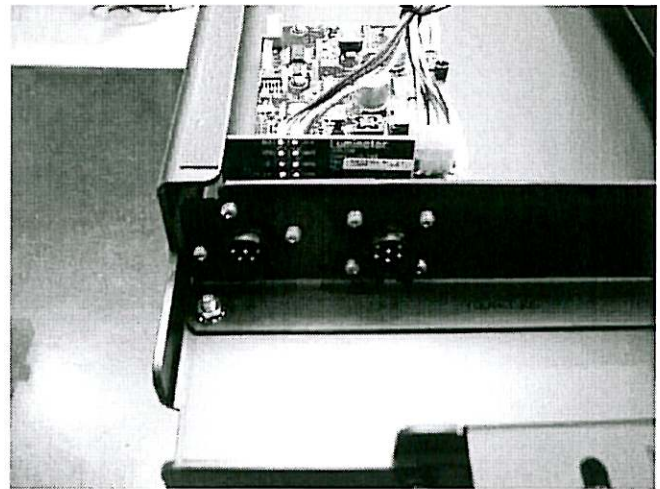
Other information which characterizes/distinguishes the items of equipment to be recalled:



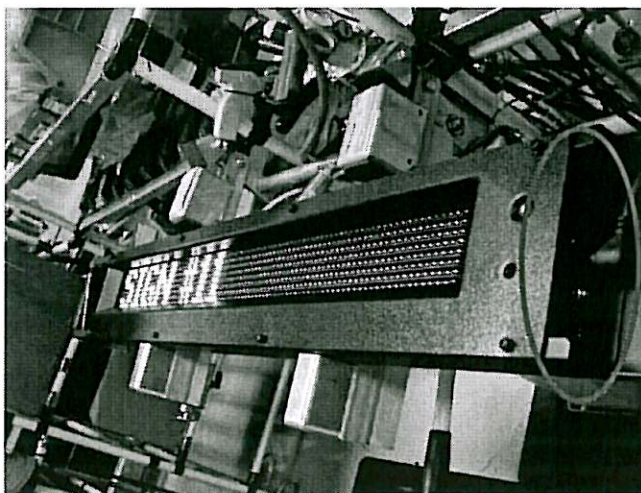
Connector Board Installed in a typical Side Destination Sign Housing



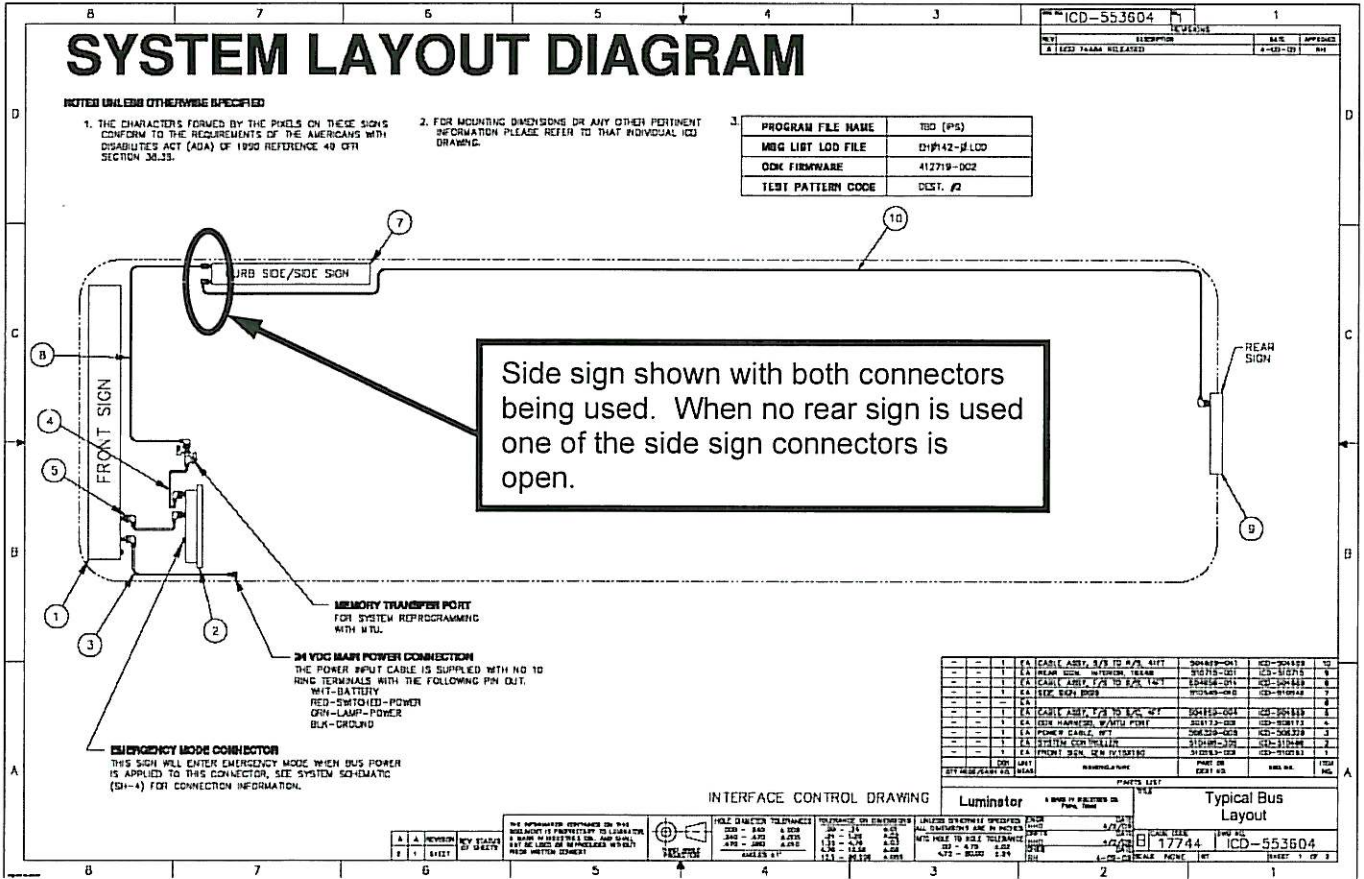
Side Destination Sign with cable connected to board



Side Destination Sign installed in Transit Bus



Typical Destination Sign Layout on Transit Buses



The following Side Destination Signs manufactured by Luminator contain the 506746 Connector board:

Make: Luminator Model: Horizon LED Side Destination Sign
Part Number: 510544-All Size: NA
Function: Display destination and route information to the exterior of the bus
Model Years Involved: 2001-2009

Make: Luminator Model: Horizon LED Side Rout Sign
Part Number: 510565-All Size: NA
Function: Display destination and route information to the exterior of the bus
Model Years Involved: 2001-2009

Make: Luminator Model: Horizon LED Side Rout Sign
Part Number: 510545-All Size: NA
Function: Display destination and route information to the exterior of the bus
Model Years Involved: 2001-2009

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.

100%

II. Identifying the Recall Population

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

Model: PWA Connector Board	Year: 2001-2009	Number of Items Potentially Involved: 18,620
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The destination signs listed above are installed on transit and paratransit buses sold in the US and Canada. These signs are sold by Luminator to Bus manufacturers and also to transit authorities directly. The signs shipped to the Bus manufacturers are installed prior to delivery to the transit authorities, the signs delivered directly to the transit authority are installed by the authority, Luminator or a third party installer.

This board is used on all side destination signs manufactured by Luminator as listed above. Only the signs with an open connector on the side sign connector board are affected. It is estimated that of the 18,620 signs that have been built and shipped by Luminator, about 50% meet the configurations described above.

Total Number Potentially Affected by the Recall: 8,879 est.

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

8.5%, this number is based on the results of our analysis of boards in the sample population as outlined below (see table). 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:

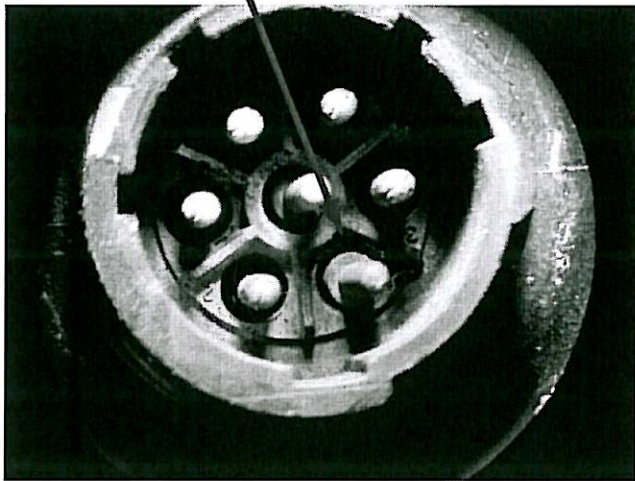
An analysis was done on a sample population of 269 sign connector boards from buses built with the specific configuration

at risk which is multiple side signs and a single side sign with no rear sign. These boards were from different transit authority locations from the Midwest to the East Coast. This population consisted of samples from various years, bus models and environmental conditions. The analysis consisted of removing the connector and microscopically examining the PWA surface below the connector for evidence of corrosion. Based on the corrosion found, it was determined that all boards 2007 and older needed to be replaced. This connector board design was first used in 2001.

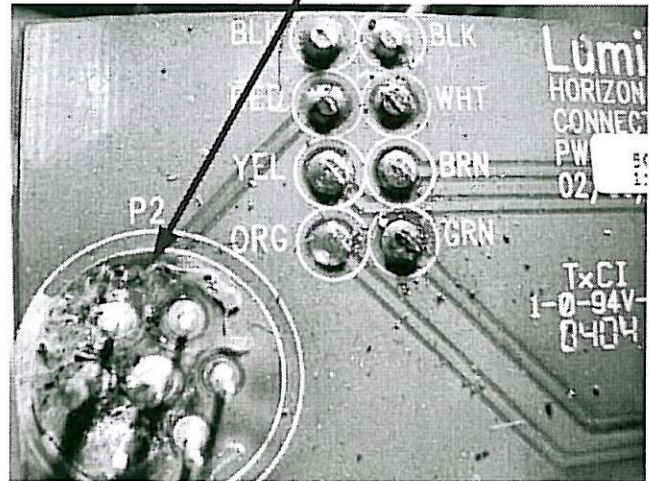
Sample Population of Connector Boards from Transit Authorities

Year of Mfg of Connector Board	Number of Boards	Corrosion found (visually)	Percentage of Boards with Corrosion
2001	30	0	0%
2002	15	1	6%
2003	65	2	3%
2004	50	13	20%
2005	10	0	0%
2006	70	9	11%
2007	4	0	0%
2008	15	0	0%
Totals	269	25	8.5%

Corrosion on Open Connector



Corrosion on board under connector



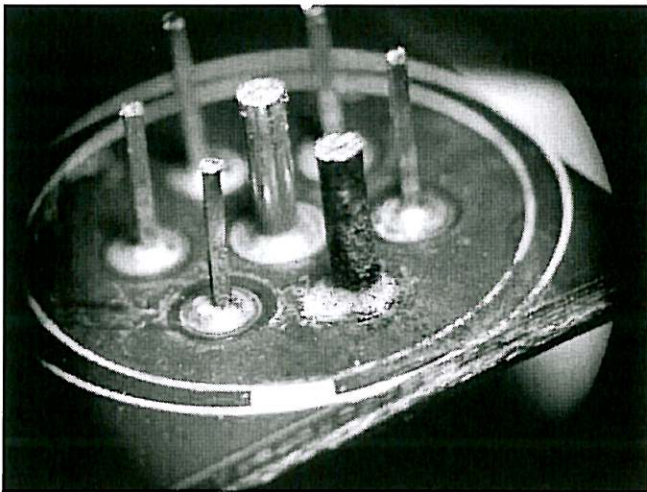
III. Describe the Defect or Noncompliance

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.

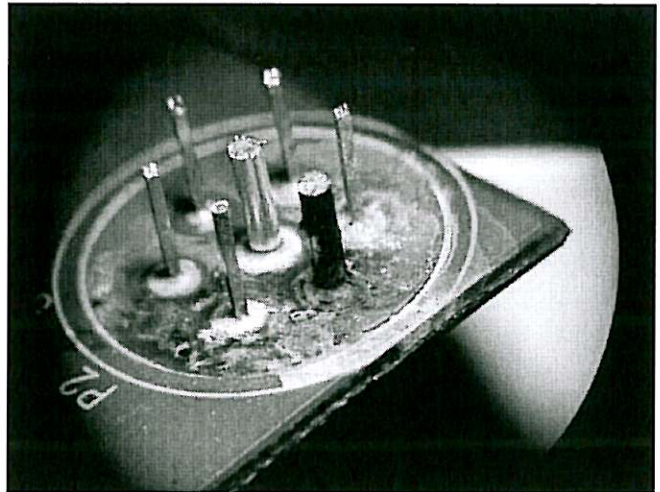
The signs listed above are equipped with the 506746 connector board that is used to "daisy chain" the Side Destination sign to other signs in the sign system. When there is no rear sign, or there are multiple side signs, one connector is left uncovered by the missing cable. This creates an open connector condition that allows debris to collect inside the connector and provides a path for moisture to ingress along the pins of the connector down to the PWA board itself causing corrosion on the solder connection between the open connector and PWA board. The corrosion allows for a conductive path between battery voltage and ground. This corrosion will allow a potential short and the sign will fail. In rare instances, this corrosion will cause the sign to smoke and possibly flame.

The photos below (taken from the sample population) show the impact of the corrosion on the board itself after the connector barrel has been removed.

Corrosion Starting on Battery Voltage Pin



Corrosion advanced to a conductive condition



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

The corrosion is caused by an accumulation of moisture under the connector. None of the connectors which have a cable attached to them show any sign of corrosion. The base of the connector is too close to the board to effectively coat the solder connections with conformal coating (a corrosion preventative). This corrosion creates the conductive path between battery voltage and ground pins. Certain cleaning practices, (i.e. spraying water and cleaning agents) used at the Transit Authorities facilities introduces more moisture into the connector and increases the likelihood of the corrosion.

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

This corrosion will allow a potential short and the sign will fail. In rare instances, this corrosion will cause the sign to smoke and possibly flame.

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

In some situations the circuit breaker will trip. This is not a consistent occurrence.

If the defect or noncompliance is in a component or assembly purchased from a supplier, identify the supplier by

corporate name and address.

The 506746 has been purchased from several suppliers however the defect is not process related. The board is manufactured exactly to the Luminator requirements. This defect is application based in that closed connectors (those with a cable attached to them) do not have this condition.

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

NA

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.

The following events lead to the identification of the root cause. Each event occurred on a bus without a rear sign and with a single open connector on the side destination sign.

1. Thermal Event Atlanta, MARTA, January, 2006 (smoke and fire, sign destroyed, unable to determine root cause)
2. Thermal Event Atlanta, MARTA, December, 2008 (smoke only, sign in tact, partial root cause identified)
3. Electrical Event Richmond, January, 2009 (smoke only, tripped breaker 3 times then failed)
4. Thermal Event, St Louis, June, 2009 (smoke only, root cause fully determined)
5. Thermal Event, MARTA, Atlanta, August, 2009 (smoke and fire, sign destroyed, fleet replacement completed 8/21/09)

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.

On all buses built in 2007 or older the connector board will be replaced with a newly designed board. The new board eliminates the possibility of arcing by putting the ground and battery voltage on separate layers of the board. The traces have also been moved to allow the maximum spacing. In addition conformal coating has been applied below the connector and a cap is installed on all open connectors to prevent the incursion of moisture and debris which would allow corrosion to develop

On all buses built since 2008, there has been no evidence of corrosion. By cleaning the connector with a moisture displacing corrosion inhibitor and subsequently capping the open connector with a vinyl cap, the conditions that allow the moisture to ingress and produce the corrosion will be eliminated.

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

1. New Connector Board, part number 508331-001 (replaces 506746-001, see Appendix 2 for drawings)
2. Ground and power on two separate layers of PWA,
3. Traces are more widely spaced,
4. Connector assembled to the board with a gap so the conformal coating can be applied to the connector solder joints.

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.

Since May of 2009 all signs built by Luminator have been shipped with a vinyl cap covering all connectors. These caps are to remain in place unless a cable is attached to the connector.

The connector board change has gone in effect as of 09/20/2009

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.

Please see Attached Timeline, Appendix 1 for notification timeline

We have concerns regarding notification of all customers. We hope for assistance from the various OEMs that have installed our equipment on their buses. Since the OEMs have done the actual installation of the signs on the buses, they will have more accurate information on the bus configurations. Since some OEMs purchase materials on blanket POs we are not always advised of the actual configuration on a specific bus and must rely on second hand information.

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.

See Attached Field Modification Instructions, Document # 904666 and Service Bulletin Document # 9230

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 maybe 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.

**Appendix 1
Thermal Time Line**

Event	Date Started	Date Complete
Thermal Event at Marta	Mon 10/30/06	Mon 10/30/06
Tim McManus Evaluation	Tue 10/31/06	Tue 10/31/06
In house investigation	Wed 11/1/06	Wed 11/1/06
Thermal Event at MARTA	Wed 12/17/08	Wed 12/17/08
Tim McManus Evaluation	Wed 12/17/08	Wed 12/17/08
In house investigation	Thu 12/18/08	Thu 12/18/08
Test effectiveness of Corrosion X spray and caps	Mon 2/2/09	Fri 2/6/09
Modify process to include caps on all signs on line	Fri 2/27/09	Fri 2/27/09
Thermal event at GRT	Wed 1/28/09	Wed 1/28/09
Tim McManus evaluation	Wed 1/28/09	Wed 1/28/09
In house investigation	Thu 1/29/09	Thu 1/29/09
Thermal Event St Louis	Wed 6/17/09	Wed 6/17/09
Tim McManus Evaluation	Thu 6/18/09	Thu 6/18/09
In house investigation	Fri 6/19/09	Fri 6/19/09
Collection of date coded equipment from field	Mon 7/20/09	Wed 7/22/09
Evaluate collected boards and ODKs	Thu 7/23/09	Thu 7/23/09
Determined date for replacement vs spray and cap	Fri 7/24/09	Fri 7/24/09
Build prototypes of newly designed boards	Mon 7/6/09	Fri 7/10/09
Test prototypes fo newly designed boards	Mon 7/13/09	Mon 7/13/09
Release drawings for new board	Wed 7/29/09	Wed 7/29/09
Get part number for Corrosion X in system.	Thu 7/30/09	Thu 7/30/09
Complete FMI	Mon 6/29/09	Wed 8/5/09
Complete Service bulletin	Mon 8/3/09	Wed 8/5/09
Determine first round quantities	Tue 7/28/09	Wed 7/29/09
Order materials for FMI	Wed 7/29/09	Fri 8/14/09
Determine customers for priority notification	Fri 7/17/09	Thu 7/30/09
Determine customers for 2nd round priority	Fri 7/31/09	Tue 8/11/09
Start sending notification to customers	Mon 8/3/09	Fri 8/7/09
Receive needed materials	Mon 8/17/09	Mon 8/17/09
Begin field mods	Tue 8/18/09	Fri 10/30/09

