GILLIG CORPORATION

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HAYWARD, CALIFORNIA
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September 22, 2004

04V-485
(14 pages)

Mr. Kenneth Weinstein
Associate Administration for Safety Assurance
National Highway Traffic Safety Administration
400 Seventh Street SW
Washington DC 20590

Dear Mr. Weinstein:

In accordance with the procedures outlined in 40CFR 573.6 Gillig is submitting the attached Safety Defect Information Report. Gillig was notified on August 11, 2004 of a safety recall on ISL engines supplied to Gillig by Cummins Inc.

Gillig has sent Cummins the cross reference listing of VIN numbers vs. engine serial numbers and Cummins will conduct the recall.

Sincerely,

GILLIG CORPORATION

Charles E. Koske
Senior Vice President, Engineering

CEK/vo
Attachment

cc: R. Birdwell

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

Safety Defect and Noncompliance Report Guide for Vehicles
PART 573 Defect and Noncompliance Report[1]

On August 12, 2004, Gillig Corporation [MFR] decided that (a defect which relates to motor vehicle safety)(a noncompliance with Federal Motor Vehicle Safety Standard No. _____) 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: September 20, 2004

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

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

Gillig Corporation 25800 Clawiter Road Hayward, Ca 94545

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

Charles E. Koske Sr. Vice President Engineering

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 Enginnering

Signed: Charles E Koske

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[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. Identify the Vehicle Models Involved in the Recall

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

Make(s): Gillig **Model Years Involved:** 2003-2004 **Model(s):** Phantom & low floor transit buses

Production Dates: not significant **Ending:** not significant

VIN Range: : not significant – uses of specific Cummins serial number engines identifies recall population

Vehicle Type: Bus **Bodystyle:** high & low floor buses

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

Use of specific serial number engines as provided by Cummins

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.

Approximately 10% of Gillig buses built during the time period had the effected engine.

II. Identify the Recall Population

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

Model	Year	Number of Vehicles Potentially Involved
Phantom	2004	25
Low Floor	2003/2004	114
Total Number Potentially Affected by the Recall:		**149**

4. **Furnish the approximate percentage of the total number of vehicles estimated to actually contain the defect or noncompliance:**
   Gillig has no knowledge – 100% are being repaired.

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:

See Cummins 573 report – 100% will be recalled and repaired.

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 the Cummins 573 report. An oil leak can occur on the side of the engine block adjacent the turbocharger with the potential of a vehicle fire.

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

Per the Cummins 573 report it was caused by a manufacturing assembly defected related to excessive air gun pressure used to install a plug.

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

Per the Cummins 573 report vehicle could have an oil leak.

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

See the Cummins 573 report.

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

The engine is supplied to Gillig by Cummins Inc

Cummins Inc.
500 Jackson Street
Columbus, Indiana 47201

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

Mr. Steven R. Butler Engine Certification Director

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 Cummins 573 report . Gillig knows of no reports, accidents, injuries, or fatalities on their buses related to this defect.

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.

Cummins will conduct a safety recall campaign. See attached Cummins' 573 report for details of the plug replacement.

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

The Cummins' 573 report was not clear on distinguishing characteristics other than elimination of oil leak.

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.

The Cummins 573 report states that correcting the impact gun pressure was the production remedy – they did not list an effective date.

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 has already supplied Cummins the Vehicle serial numbers and contact information to enable them to conduct the recall.

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 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

PART 573 Defect and Noncompliance Report[1]

On August 5, 2004, Cummins Inc. 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 Reports.

Date this report was prepared: August 6, 2004

Furnish the manufacturer's identification code for this recall (if applicable): 0437

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.

Cummins Inc.

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

Steven R. Butler, Engine Certification Director

Telephone Number: 812-377-3713 **Fax No.:** 812-377-8739

Name and Title of Person who prepared this report.

Steven R. Butler, Engine Certification Director

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) 366-5226 or by FAX at (202) 366-7882.

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: Engine Cylinder Block

Make: Cummins **Model:** ISC/ISL (Pegasus)

Part Number: 3970750 & 3971391 **Size:**

Function: Block Boss hole #456 contains cup plug which seals off an oil rifle drilling.

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.

This recall represents ISC/ISL engines produced for school bus, transit bus, emergency vehicles and recreational vehicles between the dates of December 12, 2003 thru April 12, 2004. Cummins produced 3,063 engines for these applications in that time frame.

II. Identifying the Recall Population

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

Model	Year	Number of Items Potentially Involved
ISC Engines	December 12, 2003 – April 12, 2004	1457
ISL Engines	December 12, 2003 – April 12, 2004	1606

Total Number Potentially Affected by the Recall 3063

4. Furnish the approximate percentage of the total number of items of equipment estimated to actually contain the defect or noncompliance: At this point in time Cummins Inc. expects only 4.5% of the units to actually push out a cup plug. However we will pursue a 100% recall on all school bus, transit bus, emergency vehicle and recreational vehicle engines used in the suspect time frame.

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:

The recall population includes ISC and ISL engines built between December 12, 2003 and April 12, 2004.

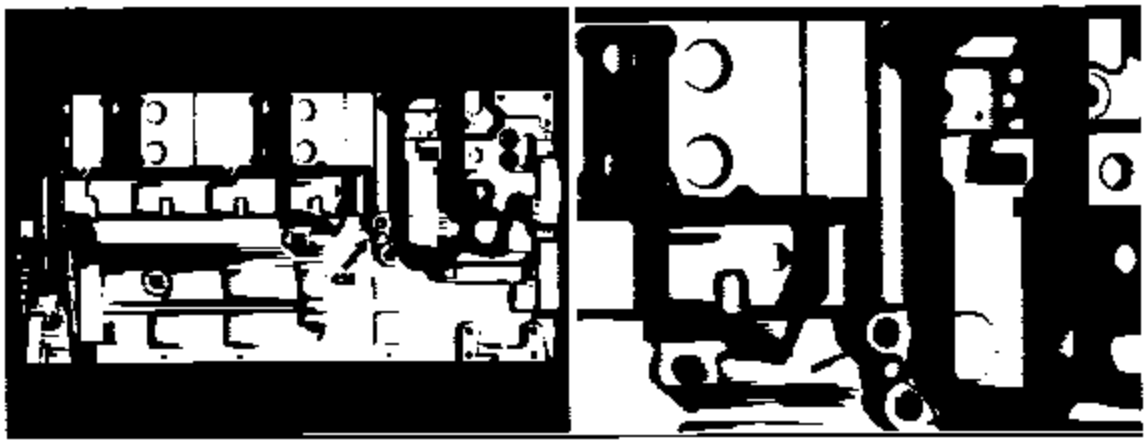
The dates were determined by using the first known block failure date. The end date, April 12, 2004 was selected as it was built with revised production line processes for cup plug installation and 100% inspection with dye penetrant for cracks.

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.

Engine block boss #456 for the oil rifle may crack upon installation of the cup plug.

Refer to illustration.



The identified range of engines were assembled using a pneumatic tool to install the plug, in which the air pressure was set high enough to create stresses in the cylinder block casting. These stresses could eventually create open cracks in the cylinder block or result in less than adequate clamping pressure around the plug. When the plug loses it's clamping pressure, it will loosen from the cavity, causing an oil leak. This leakage of oil, near the exhaust manifold and turbocharger has the potential to ignite and cause a fire in the engine compartment of the vehicle.

Describe the cause(s) of the defect or noncompliance condition.
The root cause is due to excessive air gun pressure.

Describe the consequence(s) of the defect or noncompliance condition.
If the vehicle is in operation the cup plug can leak oil, or in extreme cases, push out of the block.

Identify any warning which can (a) precede or (b) occur.
The engine could exhibit an external oil leak from the cup plug location. If the cup plug leaks oil at high pressure, oil will spray from the location and trigger a low oil pressure fault and illuminate the red check engine light notifying the operator to shut down the engine.

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

The defect is related to the design and installation methods developed by Cummins, Inc.

Identify the name and title of the chief executive officer or knowledgeable representative of the supplier:
Steven R. Butler, Engine Certification Director, Cummins Inc.

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.

At this time there have been 10 incidents where the cup plug has pushed out of the oil rifle boss. The incidents occurred from March of 2004 through June of 2004. These incidents have not resulted in personal injury but did require general cleaning of the engine compartment and in one of the ten failures a fire required replacement of some melted wire looms.

~~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.

The remedy for engines in service is to install a steel cup plug boss cap which is attached over the boss/cup plug location with an industrial sealant.

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

The remedy used in the service repair kits seals and retains the cup plug in the block boss preventing it from leaking or exiting the block.

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.

The remedy used on the production line implemented a lower impact gun pressure to reduce the stress applied to the block boss during cup plug installation plus 100% dye penetrant checks to ensure none of the blocks were cracked.

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.

Customer notification – to commence within 5 working days after NHTSA review of our draft communication.

Repairs have already begun.

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.***

A draft copy of the letter to our customers is attached.

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

August 6, 2004

Mr. Kenneth Weinstein
Associate Administrator for Safety Assurance
U.S. Department of Transportation
National Highway Traffic Safety Administration
400 Seventh Street, S.W.
Washington, DC 20590

Dear Mr. Weinstein:

In accordance with the procedures outlined in 49 CFR Part 573.6, we are submitting the attached safety defect information report. This recall involves 3063 units of ISC and ISL Cummins engines. These are 8.3L and 8.9L, diesel engines that are used in school and transit bus, recreational vehicle and emergency vehicle applications.

The defect was caused by assembling engines using an out-of-specification pneumatic tool that presses a cup plug into a drilling in the cylinder block. The stresses induced in the cylinder block could cause a crack in the block, or result in less-than-adequate clamping pressure around the plug. If the plug loses its clamping pressure, it may come loose from the cavity, causing an oil leak. This leakage of oil near the exhaust manifold and turbocharger has the potential to ignite and cause a fire in the engine compartment of the vehicle. Cummins has received reports of 25 oil leaks and one reported fire. No reports of personal injury or death have been reported to date as a result of this defect.

Cummins will conduct a safety recall to install a steel cup plug boss cap to all designated engines. All supporting details are outlined in the attached Report.

In addition, we have included a draft of the letter we would propose to send to our customers.

Cummins Inc. will await your input on next steps. As always, if you have any questions, please contact me.

Sincerely,

Steven R. Butler
Engine Certification Director

CC Via Fax: Mrs. Kelly Schuler – Office of Defects Investigation – NHTSA

Phone: 812-377-3713
Fax: 812-377-8739
Email: steven.r.butler@cummins.com