

## PART 573 Defect and Non-Compliance Report

On 31, August 2005, Cummins 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, Defects and Non-Compliance Reports.

This report was prepared on September, 8 2005

**Manufacturer's Identificaiton Code for this Recall: SAF05009**

*05V-405  
(6 pages)*

### 1. Fabricating Manufacturer/Brand Name/Trademark Owner of the Recalled Vehicle

Optima Bus.Corp.  
P.O. Box 19140  
Wichita, KS 67204-9140

For further information on this report contact:  
Keith Pfannenstiel, P.E.  
VP of Engineering  
P.O. Box 19140  
Wichita, KS 67204-9140

Phone: 316-779-7700  
Fax: 316-779-7712

The person preparing this report is:  
Andrew Schaar  
Technical Publications  
P.O. Box 19140  
Wichita, Ks 67204-9140

Signed: \_\_\_\_\_

### 2. Identification of vehicles(s) with potential defect

**Make:** Optima Bus Corp.  
**Model Years Involved:** 2004 - 2005  
**Model:** ISB02 - Opus 29 & 34, AH-28 and Spares  
**Production Dates:** Beginning: -1-1-2004 Ending: -7-23-2005  
**VIN Range: Opus 29** Beginning: - 535216, 535233 Ending: 535298  
**VIN Range: Opus 34** Beginning: - 535071 Ending: 535137  
**VIN Range: Trolley AH-28** Beginning: - 535289 Ending: 535266  
**Spare Engines:** 1 - Breckinridge, 2 - Salt Lake City

**Vehicle Type:** Diesel  
**Bodystyle:** Opus, Trolley

**Description of Vehicles in Recall Compared to those Not in the Recall:** Electronic Control Module calibration that controls the fuel lift pump may cause the lift pump failure.

**Approximate Percentage of the Production of all the Recalled Models:** 100%

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3. **Total Number of Vehicles Recalled Potentially Containing the Defect:** 167 with 3 spares

**Total Number Potentially Affected by the Recall:** 167 with 3 spares

4. **Approximate Percentage of the Total Number of Vehicles Estimated to Actually Contain the Defect:** 100%

**Determination of Recall Population:** Not Applicable

5. **Defect Description:** Cummins fuel lift pump.

**Cause of Defect:** Faulty fuel lift pump.

**Consequences of Defect:** The subject ECM calibration controls the fuel lift pump operation. The defect results in erratic voltage supply to the fuel lift pump which causes premature electrical brush wear internal to the fuel lift pump. This premature wear could result in fuel lift pump failure and in some cases may cause an engine stall condition.

**Warning Which Can Occur:** Prior to engine stalling, the operator could experience low engine power, engine misfire and the check engine warning light will illuminate.

**Corporate Name and Address of the Supplier of Defective Component:** Cummins, Inc. Box 3005, Columbus, IN. 47202-3005

**Name and Title of CEO or Representative of Supplier:** Steven R. Butler, Engine Certification Director

6. **Chronological Summary (Defect)**

31 August 2005 - Notified by Cummins, Model Manufactured between 2004 - mid 2005.  
NHTSA Campaign ID Number 05E-054.

7. **Test Reports/Data that Non-Compliance was determined:** Not Applicable

8. **Manufacturer's Remedy for the Defect -** Replacement of potentially defective parts.

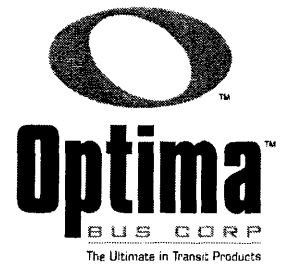
**Distinguishing Characteristics of the Remedy Component/Assembly Versus the Recalled Component/Assembly:** ECM recalibration and replacement of the fuel lift pump.

**How and When the Recall Condition was Corrected in Production -** Cummins recalibrated current ECM's in production before damage to fuel pump began.

9. **Recall Schedule -** All Optima Bus Corp. customers will be notified of the Cummins recall and required to inspect and repair their vehicle.

# Safety Bulletin

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8 September 2005

Address Block

**MODEL(s):** Opus 29  
Opus 34  
AH-28  
Spare Engines

**SUBJECT:** Cummins – Lift Fuel Pump  
Optima Bus Bulletin #: SAF05009  
NHTSA #:

Dear:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Optima Bus Corp. has been informed (**Cummins Safety Bulletin 05E-054**) that a defect which relates to motor vehicle safety exists in the lift fuel pump on Opus ISB02 engines that were shipped to us from Cummins.

Enclosed please find Cummins's Safety Bulletin 05E-054. Cummins will notify you of the recall and upon Cummins completion of the work please complete the certificate of compliance enclosed with the signature of the mechanic who performed the service and return to Optima in accordance with the instructions on the certificate.

We regret any inconvenience that this action may cause you. However, we are concerned about your safety. If your dealer fails or is unable to remedy this defect without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, SW, Washington, DC 20590, or call the toll-free Auto Safety Hotline at 1-888-327-4236.

If you have any questions please contact our customer service department at 1-888-391-1777.

Sincerely,  
OPTIMA BUS CORP.

Dan Scantlin  
Customer Service Manager



**Cummins Inc.**

Box 3005  
Columbus, Indiana 47202-3005  
U.S.A.

August 29, 2005

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

Dear Sir or Madam:

The following information is submitted in accordance with the National Highway Traffic Safety Administration's reporting regulations, 49 CFR Part 573.6.

Cummins Inc. (Cummins, or, the Company) has decided that there is a potential safety-related defect with respect to an engine control system component on Cummins ISB-02 diesel engines manufactured by Cummins and (a) installed as original equipment on those motor vehicles identified below; and (b) sold as original equipment service (OES) parts and engines only for the specific motor vehicle applications involved in this recall action

**1. Product identification and customer channels.**

This defect involves production of the Cummins ISB-02 diesel engine for covered vehicles, as follows:

Model	Year	Total Units
ISB-02 (School Bus Applications)	2004-2005	2,390
ISB-02 (Emergency Vehicle Applications)	2004-2005	3
ISB-02 (Transit Bus Applications)	2004-2005	409
ISB-02 (Original Equipment Service)	2004-2005	58
Total Recall Population		2860

All ISB-02 engines in each of the respective original and original equipment service populations are covered by this recall. All original equipment service ISB-02 engines and associated components sold for the subject motor vehicle applications are included in the above-referenced Total Recall Population, so as to avoid double counting. A listing of the respective, subject populations, by vehicle manufacturer, will be provided to the agency in the near future.

- 2. Generic name of the item:** Electronic Control Module Calibration
- Engine Make:** Cummins
- Model:** ISB-02
- Part Number:** N/A
- Function:** Provides engine operating parameters.

**3. Component supplier:**

The subject Electronic Control Module (ECM) calibration was developed by Cummins Inc.

**4. Estimated extent of defect population.**

Cummins estimates that approximately 1.9% of the subject population of engines could result in an engine stall condition. Cummins will pursue a 100% recall on all subject school bus, transit bus and emergency vehicle applications.

Cummins notes that the Company has voluntarily decided to conduct this recall, despite the low failure rate of the subject vehicles. This is attributable to their unique, safety-sensitive applications, especially school buses, which comprise most of the population to be campaigned.

**5. Description of defect.**

The subject ECM calibration controls the fuel lift pump operation. The defect results in erratic voltage supply to the fuel lift pump which causes premature electrical brush wear internal to the fuel lift pump. This premature wear could result in fuel lift pump failure and in some cases may cause an engine stall condition. There is no defect in the fuel lift pump itself.

**6. Chronology of events.**

The defective ECM software was released into production on January 1, 2004. In the April/May 2005 timeframe Cummins received isolated reports of engine performance issues potentially associated with the defect. In response to these reports, a field service and engineering review was conducted which has led to a management decision to conduct this safety campaign on August 23, 2005

To date, Cummins is not aware of any incidents (injuries, fatalities, or accidents/crashes) which were a result of this defect. Based on the warranty claim data for the subject population, it is estimated that approximately 1.9% of the engines could experience a stall resulting from the defective ECM calibration.

**7. Remedy program.**

The remedy, without charge to owners, will include the ECM recalibration and replacement of the fuel lift pump.

**8. Part 577 notice letter.**

The customer notice letter is in the process of being prepared and will be submitted in draft to the agency as soon as possible.

**9. Conduct of recall campaign.**

Subject to concurrence of its OEM customers, Cummins will be conducting the respective recalls with the customers of each OEM.

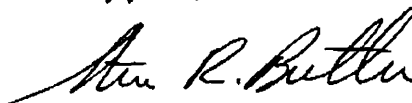
**10. Customer/owner notifications.**

Notifications are expected to begin in October 2005, once (a) Cummins is in receipt of the OEM recall authorizations and customer lists and (b) the parts procurement process has been completed. Cummins assures NHTSA that it will make a good faith effort to shorten this time period.

\* \* \*

Please advise the undersigned of the recall campaign number assigned by the Office of Defects Investigation to this recall. Cummins campaign code for this recall will be C0539.

Sincerely yours,



Steven R. Butler  
Engine Certification Director

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Email: [steven.r.butler@cummins.com](mailto:steven.r.butler@cummins.com)