

**Safety Defect and Noncompliance Report Guide for Vehicles  
PART 573 Defect and Noncompliance Report<sup>1</sup>**

On 10-23-2009, 2009, Emergency One Incorporated [MFR] decided that a noncompliance 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 Reports.

Date this report was prepared: 12-21-2009

Furnish the manufacturer's identification code for this recall (if applicable): 4EN

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.

Emergency One Incorporated.

1701 SW. 37th Ave. Post Office Box 2710

Ocala, Florida 34478-2710

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

Billy Miles Director of Operations

1601 SW. 37th Ave. Ocala, Florida. 34474

Telephone Number: 352-861-3223

Fax No.: 352-237-2999

Name and Title of Person who prepared this report.

William F. McCombs , Principle Engineer

Signed:



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<sup>1</sup>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): Emergency One Fire Fighting Chassis Model Years Involved: 2009

Model(s): Typhoon, and Cyclone II

Production Dates: Beginning: 9-15-2009 Ending: 9-27-2009

VIN Range: Beginning: 4EN6AAA8891005326 Ending: 4EN6AAA8791005396

Vehicle Type: Fire Fighting Pumper Body Style: Fire Truck

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

The notification involves the above listed chassis models that have a Cummins engine model ISC and ISL with a serial number that is listed on the Cummins Recall Campaign 09E-046 and have a regeneration inhibit switch mounted on the vehicle dash.

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. Identify the Recall Population**

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

Number of Vehicles: (7) Seven Vehicles were shipped to Customers

Model Typhoon and Cyclone II Year 2009

Units Involved (6) Six Typhoon Chassis with Cummins ISC and ISL engines

(1) One Cyclone II chassis with a Cummins ISL engine.

Total Number Potentially Affected by the Recall: (7) Units

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:

Cummins supplied a list of 32 engine serial numbers that had a potential software programming defect that does not allow the dash mounted regeneration inhibit switch to work when expected. Emergency One reviewed our production records and determined that 7 units had engines with Cummins serial numbers on the recall 09E-046 list provided by Cummins and that had the regeneration inhibit switch installed in the vehicle and had been shipped to customers. This consisted of 100% of the population of units with the regeneration inhibit switch and that had been shipped.

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### 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.

Cummins supplied engines to Emergency One that has incorrect software programming in the engine control computer that does not allow a dash mounted switch (when installed) to inhibit the regeneration cycle of the emission control system. When the emission system goes into a regeneration cycle to clear the carbon build up in the catalytic convertor it injects fuel into the exhaust system to burn the carbon deposits. This can create higher than normal exhaust temperatures exiting from the exhaust pipe. The inhibit switch allows the vehicle operator to prevent the regeneration cycle if they decide the vehicle is in a location where the increased exhaust temperature maybe detrimental. The incorrect software does not recognize the input from the inhibit switch so the regeneration cycle would not be delayed like the operator would be expecting.

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

The defect is caused by incorrect software programming in the Cummins engine control computer.

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

When the engine emission system goes into regeneration mode the vehicle tail pipe exhaust temperatures are increased. It is possible for certain emergency vehicles equipped with a split shaft power take off water pump drive to began the regeneration cycle in a stationary mode. If the vehicle is in an area of tall grass, the elevated exhaust temperatures may create a fire hazard. The operator of the vehicle may choose to put the Regeneration switch to inhibit mode, but the regeneration cycle would not be inhibited due to the incorrect software in the engine computer.

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

There is a dash mounted regeneration light that must illuminate before the regeneration process will start. The regeneration light may be illuminated or flashing. This light indicates the engine is in a regeneration mode. Once the regeneration cycle begins, the (HEST) High Exhaust System Temperature light will be illuminated indicating the regeneration cycle is in process.

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**If the defect or noncompliance is in a component or assembly purchased from a supplier, identify the supplier by corporate name and address.**  
**Cummins Inc. Box 3005, Columbus, Ind. 47202**

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

**Steven R. Butler, Director - Product Safety**

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**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.**

**Received Cummins formal recall campaign notice 09E-046 on 10-21-2009 for a software problem in the engine control computer that would not allow the regeneration switch to work correctly in the inhibit mode. Cummins supplied a list of 32 engine serial numbers that had the incorrect software. On 10-23-2009 E-One determined (7) units had been shipped that had both the incorrect software and a Regeneration Inhibit Switch installed.**

**E-One has received no reports of a problem from customers, nor reports of any injuries or incidents involving the non-operation of the regeneration inhibit switch.**

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**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.**

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**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 owners of the (7) units will be contacted by Cummins and the engine computer will have new ECM software installed at no cost to the owner.**

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

**The new engine software has a revision number vs. the previous software.**

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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.

Engines in production at our facility were reprogrammed with the software revision.

Engines at the regional distributor were reprogrammed with the software revision.

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### 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.

All end customers were to be notified by 11-30-2009 by Cummins Inc. Recall communications were supplied to NHTSA by Cummins under the campaign number 09E-046

As of 11-30-2009 six (6) of the seven (7) units have been reprogrammed. The final un-reprogrammed unit is in dealer possession and not in the possession of a customer.

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### 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.