

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

On 4-15-2014, E-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: 4-16-2014

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.

E-One Incorporated.

1701 SW. 37th Ave. Post Office Box 2710

Ocala, Florida 34478-2710

Identify the corporate official, by name and title, which 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:



¹Each 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: 2013 -2014

Model(s): Chassis Models Typhoon, Cyclone II, Quest

Production Dates: Beginning: 3-19-2013 Ending: 4-15-2014

VIN Range: Beginning: 4EN6AAA80D1008004 Ending: 4ENLABA88E1008231

Vehicle Type: Fire Fighting Vehicle Body Style: Fire Truck Pumper, Fire Rescue Vehicle, Fire Aerial Ladder, Fire Tanker

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

The notification involves (112) units that were built with a part number (508875) Vehicle Input Module. This module provides input data and monitors operational functions of the vehicle. Only units with this input module are being 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% of units manufactured and shipped with the (508875) input module manufactured between 3-19-2013 and 4-15-2014 are being recalled.

II. Identify the Recall Population

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

Number of Vehicles: (112) units

Models: Chassis Models (17) Cyclone II, (91) Typhoon , (4) Quest chassis.

Total Number Potentially Affected by the Recall: (112)

4. Furnish the approximate percentage of the total number of vehicles estimated to actually contain the defect or noncompliance: 100% of units shipped to customers with the (508875) input module.

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:

It has been determined that a software programming defect resides in the Vehicle Input Module (508875) A Where Used report of vehicles built with the affected part was generated and compared with manufactured and shipped units. The affected part was first used in production units in 3-19-2013. It has been used in 112 shipped units until 4-15-2014.

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.

It has been determined a programming defect exists in the software used in the (508875) Vehicle In-Put Module. This module has a circuit board and is located in the passenger side forward overhead area of the vehicle cab. The Module is used to supply programming inputs that monitor and control some vehicle functions such as lights, warning indicators and some interlock functions of the vehicle electrical system.

If the vehicle Master Power Switch is shut off while the driver has their foot on the brake pedal, when the Master Power Switch is turned back on, the brake lights will stay illuminated until the brake pedal is cycled again.

If the brake light is illuminated when the Master Power Switch is turned on, the engine hi-idle switch will be locked out from increasing the engine operating rpm's. This function is used to increase operating performance of ancillary hydraulic driven equipment that is sometimes mounted on the vehicle. This equipment may consist of aerial devices, electrical generators and rescue tools.

Describe the cause(s) of the defect or noncompliance condition.
Incorrect software programming of the (508875) Vehicle Input Module.

Describe the consequence(s) of the defect or noncompliance condition.
The brake lights being illuminated on a stationary vehicle could be confusing to passing

motorists. It's possible that the vehicle could be started and driven without cycling the brake pedal. In this condition, the brake lights could be illuminated even though the brakes are not being applied. The performance of ancillary installed equipment could be reduced while the brake light is illuminated.

Identify any warning which can (a) precede or (b) occur.
When the vehicle driver activates the engine Hi-idle switch, and the engine RPM's do not increase to a pre-set level.

If the defect or noncompliance is in a component or assembly purchased from a supplier, identify the supplier by corporate name and address.
Not applicable

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

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.

On approximately 2-24-2014, E-One technicians reported a possible system anomaly involving the brake lights on a vehicle being road tested. A vehicle electrical system was constructed and set up for bench testing. Since the possible anomaly may have involved computer software, a computerized monitoring system was integrated into the testing arrangement. After various tests were conducted, our electrical engineering personnel were able to duplicate the anomaly. The defect was isolated to the software program that resides in the (508875) Vehicle Input Module. After various software re-writes it was determined the defect could be repaired with a software update to an existing vehicle (508875) Vehicle Input Module.

While there have been no field or customer reports, warranty claims, accidents, injuries or fatalities involving this defect, E-One has decided on 4-15-2014 to recall all vehicles that have been shipped with this defect.

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 software for the (508875) Vehicle Input Module has been modified to resolve the programming defect. The revised software is uploaded into the module by plugging a laptop with the revised programming into the access port at the left side of the steering wheel in the cab dash. When using the Diagnostic Software Program on a laptop computer, the effectively date of the loaded software can be checked. Any software with an effectively date prior to 4-15-2014 needs to be updated.

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

The control software for the (508875) Vehicle Input Module has had the logic algorithms modified to address the defect.

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.

All inventory is being inspected and re-programmed with revised software.

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.

E-One expects to notify customers on/or by May 15th 2014

New revised software is available for installation.

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.*

E-One is to notify the owners of the vehicles. See attached draft notification letter.