Part 573 Safety Recall Report 18V-019

Manufacturer Name : E-One Incorporated
Submission Date : JAN 09, 2018
NHTSA Recall No. : 18V-019
Manufacturer Recall No. : NR

Manufacturer Information :

Manufacturer Name : E-One Incorporated
Address : 1601 S.W. 37TH AVENUE
Ocala FL 34474
Company phone : (904) 237-1122

Population :

Number of potentially involved : 1,147
Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2013-2017 E-ONE CYCLONE 2
Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES
Body Style : ALL
Power Train : DIESEL
Descriptive Information : Vehicles equipped with a Cummins ISL, L9, ISX15, or X15 engine equipped with a starter lock-out relay that does not have a diode in the starter solenoid circuit to improve the longevity of the lock-out relay.
Production Dates : JAN 01, 2013 - AUG 15, 2017
VIN Range 1 : Begin : NR End : NR ☐ Not sequential

Vehicle 2 : 2013-2017 E-ONE TYPHOON
Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES
Body Style : ALL
Power Train : DIESEL
Descriptive Information : Vehicles equipped with a Cummins ISL, L9, ISX15, or X15 engine equipped with a starter lock-out relay that does not have a diode in the starter solenoid circuit to improve the longevity of the lock-out relay.
Production Dates : JAN 01, 2013 - AUG 15, 2017
VIN Range 1 : Begin : NR End : NR ☐ Not sequential

Vehicle 3 : 2013-2017 E-ONE QUEST 2
Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES
Body Style : ALL
Power Train : DIESEL
Descriptive Information : Vehicles equipped with a Cummins ISL, L9, ISX15, or X15 engine equipped with a starter lock-out relay that does not have a diode in the starter solenoid circuit to improve the longevity of the lock-out relay.
Production Dates : JAN 01, 2013 - AUG 15, 2017

VIN Range 1 : Begin :	NR	End :	NR	☐ Not sequential

Description of Defect :

Description of the Defect :	The affected vehicles are equipped with a starter lock-out relay which accumulates damage over time caused by high voltage transients emanating from the starter solenoid during startup. High stop/start duty cycles could cause failure of the relay over time. A failed starter lock-out relay will cause a no-start condition of the engine. Failure of the starter lock-out relay does not pose a risk of unexpected engine shut-down during normal engine operations, neither does it pose a risk to normal safe on-road or on-scene operation of the vehicle while the engine is running.
FMVSS 1 :	NR
FMVSS 2 :	NR
Description of the Safety Risk :	A failed starter lock-out relay will cause a no-start condition of the engine.
Description of the Cause :	The affected vehicles are equipped with a starter lock-out relay which accumulates damage over time caused by high voltage transients emanating from the starter solenoid during startup. High stop/start duty cycles could cause failure of the relay over time.
Identification of Any Warning that can Occur :	"Hard" starting, or the vehicle may require multiple attempts to start.

Supplier Identification :

Component Manufacturer

Name :	NR
Address :	NR
	NR
Country :	NR

Chronology :

Sept 2017 - E-ONE Electrical engineer traveled to Boston, MA then visited Aurora, IL to investigate reports of intermittent no-start conditions on E-ONE trucks.

Nov to Dec 2017- Investigation into root cause, including discussions with our engine vendor to understand change history of parts in question, and investigations on other vehicles in our fleet to identify the population that might be affected. Root cause was identified as damage caused to the starter lock-out relay by a high transient voltage during start-up. The resolution was developed.

Jan 2, 2018: A decision was made to recall the affected population.

Description of Remedy :

Description of Remedy Program :	E-ONE recommends installation of a diode in the starter solenoid circuit to improve the longevity of the lock-out relay. Additionally, E-ONE recommends replacement of the existing starter lock-out relay with a new one. Vehicles subject to this recall are to be inspected and repaired by an E-ONE certified dealer or technician. E-ONE will compensate the dealer or owner for installing a relay/diode kit (E-ONE part # 1081125), provided free of charge if it has not already been replaced during normal maintenance. Installation of each relay/diode kit should take approximately 1 hour.
How Remedy Component Differs from Recalled Component :	The relay/diode kit contains a diode in series with the relay. The diode is absent from the current assembly.
Identify How/When Recall Condition was Corrected in Production :	Vehicles in production beginning Aug. 2017 had diodes included to their assemblies.

Recall Schedule :

Description of Recall Schedule :	1) Inform dealers through email approximately a week before mailing to customers 2) Mail recall letter to customers.
Planned Dealer Notification Date :	MAR 02, 2018 - MAR 05, 2018
Planned Owner Notification Date :	MAR 05, 2018 - MAR 09, 2018

* NR - Not Reported