



March 11, 2014

Jennifer Timian
Chief, Recall Management Division
National Highway Traffic Safety Administration
NVS-215, Room W46-421
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Ms. Timian,

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

Zero Motorcycles Inc. has determined that a defect which relates to motor vehicle safety exists on certain model year 2014 Zero Motorcycles motorcycles.

IDENTIFICATION OF EQUIPMENT POTENTIALLY CONTAINING THE DEFECT:

The recall population of 94 motorcycles includes:

- 2014 model year Zero SR model motorcycles built 12/30, 2013 through 02/20, 2014
- 2014 model year Zero S model motorcycles built 12/26, 2013 through 02/18, 2014
- 2014 model year Zero DS model motorcycles built 01/24, 2014 through 02/04, 2014
- 2014 model year Zero FX model motorcycles built 01/14, 2014 through 01/27, 2014

This covers the entire range of motorcycles potentially containing the subject defect.

DESCRIPTION OF DEFECT:

The subject motorcycles have a potential manufacturing defect in their motor rotors, which may allow the rotor to contact the stator at sustained maximum rpm. Should the rotor contact the stator during the operation of the motorcycle, the motor could lock up, potentially leading to a lockup of the rear wheel, which could lead to a crash.

CHRONOLOGY OF EVENTS:

On 02/24/14, Zero Motorcycles was notified of a motor lockup on a 2014 Model Year SR motorcycle VIN 538SM5Z37EC [REDACTED], which was being ridden aggressively at top speed by an expert rider on a race track in Australia. This event did not conclude in either an accident or injury. However, since this was a highly unexpected failure, on the same day, Zero Engineering obtained a production motor from inventory and was able to reproduce the failure on a motor dyno test at sustained max rpm and temperature (extreme durability test).

On 02/25/14, Zero Motorcycles issued an internal Stop Ship to investigate this situation further. During the ensuing days, additional motor samples were tested, with similar results obtained on a portion of the tested population. Hence, a screening test was developed to ensure the integrity of motors moving forward.

As of 03/10/14, neither the motor manufacturer nor Zero has determined the exact nature of the manufacturing defect that is the root cause of these unexpected failures. Both teams are diligently continuing to investigate this situation and will continue with 100% motor screening for the foreseeable future.

On 03/10/2014, Zero Motorcycles completed its internal investigation with regards to the safety implications of this concern and concluded that 2014 Model Year model motorcycles built prior to 02/25/14 have a motor rotor that could contact the stator when operated at sustained maximum rpm, which could lead to a rear wheel lockup situation. Zero Motorcycles executive management considered this information and determined that a defect related to motor vehicle safety existed.

Zero Motorcycles is not aware of any accidents or injuries caused by this condition.

DESCRIPTION OF THE PROGRAM TO REMEDY THE DEFECT:

The remedy of this defect is for Zero Motorcycles dealers to conduct an in-motorcycle stationary screening test of the motor. Should the motor fail this test, it will be replaced with a new, pre-screened motor. Dealers and owners will also be advised to keep motor rpm below 5,000, should they choose to ride the suspect motorcycles prior to running this screening test. 5,000 rpm corresponds to the following approximate top speed per model: 85 mph on SR, 79 mph on S, 82 mph on DS, and 71 mph on FX.

SUPPLIER INFORMATION:

Motenergy, Inc.
3580 Slinger Road
Slinger, WI 53806
Tel: (262) 644-7525
Fax: (262) 644-7527
President: John Fiorenza
Contact Person: John Fiorenza

DEALER AND OWNER NOTIFICATION:

Zero Motorcycles expects to notify its dealer network no later than the week of March 10, 2014 and motorcycle owners no later than the week of March 17, 2014.

Part 577 NOTICE LETTER:

A draft of the owner notification letter is attached.

Please advise the undersigned of the campaign assigned by ODI to this recall.

Sincerely,



Richard Kenton
Director of Customer Service
Zero Motorcycles Inc.