# Part 573 Safety Recall Report

Manufacturer Name :Zero Motorcycles Inc.Submission Date :JUN 08, 2022NHTSA Recall No. :22V-403Manufacturer Recall No. :SV-RCL-022-004

### Manufacturer Information :

Manufacturer Name : Zero Motorcycles Inc. Address : 380 El Pueblo Road Scotts Valley CA 95066 Company phone : 831-438-3500

# Vehicle Information :

Vehicle 1: 2022-2022 Zero Motorcycles SR/F Vehicle Type : MOTORCYCLES Body Style : OTHER Power Train : HYBRID ELECTRIC Descriptive Information : Model year 2022 Zero SR/F and Zero SR motorcycles manufactured between April 22, 2022 and April 27, 2022. The last five digits of the vehicle identification number of affected motorcycles are between 21423 and 21486. Production Dates : APR 22, 2022 - APR 27, 2022 VIN Range 1: Begin: 538ZFDZ7XNCK21423 End: 538ZFCZ70NCP21486 Not sequential Vehicle 2: 2022-2022 Zero Motorcycles SR Vehicle Type : MOTORCYCLES Body Style: OTHER **Power Train : HYBRID ELECTRIC** Descriptive Information : Model year 2022 Zero SR/F and Zero SR motorcycles manufactured between April 22, 2022 and April 27, 2022. The last five digits of the vehicle identification number of affected motorcycles are between 21423 and 21486. Production Dates : APR 22, 2022 - APR 27, 2022 VIN Range 1: Begin: 538ZFDZ7XNCK21423 End: 538ZFCZ70NCP21486 Not sequential

### **Description of Defect :**

Description of the Defect :The subject motorcycles may have been manufactured with front brake caliper<br/>bolts that have a different thread pitch that can cause damage to the mounting<br/>threads on the fork.FMVSS 1 :NRFMVSS 2 :NR

The information contained in this report was submitted pursuant to 49 CFR §573

## Population :

Number of potentially involved :23Estimated percentage with defect :10 %

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Description of the Safety Risk :	The incorrect thread pitch could cause damage to the mounting threads on the fork, which could reduce the clamping load, which in turn could cause the caliper to come loose. If the caliper were to come loose, braking force could be reduced, which could cause a crash.
Description of the Cause :	Zero Motorcycles operations personnel placed the wrong parts on the manufacturing line along with correct parts for the subject motorcycles. These motorcycles were correctly assembled but may have used incorrect bolts.
	If a caliper were to come loose, rattling or knocking noises could be heard during braking events leading up to reduced braking force.

#### **Involved Components :**

Component Name 1:	HEX FLANGE BOLT STAR DRIVE PER ZM 88-08813 M10X60
Component Description :	HEX FLANGE BOLT STAR DRIVE PER ZM 88-08813 M10X60 8.8 ZM-F-01 ZM-L-02
Component Part Number :	90-08142
Component Name 2 :	HEX FLANGE BOLT STAR DRIVE PER ZM 88-08813 M10X55X
Component Description :	HEX FLANGE BOLT STAR DRIVE PER ZM 88-08813 M10X55X1.25 THREAD 10.9 ZM-F-01 ZM-L-02
Component Part Number :	90-08134

#### **Supplier Identification :**

#### **Component Manufacturer**

Name : BOSSARD NORTH AMERICA INC Address : 47849 Fremont Blvd Fremont California 94538 Country : United States

#### **Chronology**:

5/11/22 Production engineering alerted Quality engineering to an issue on the production line (station VB06 FST) where the front brake caliper bolt would not install properly on VIN#21652. It was found that the incorrect bolt was being used; the incorrect bolt is similar in appearance but has coarse threads and is 5mm longer. When installed, the incorrect bolt will damage the mating threads inside the fork. VIN#21652 was taken

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offline and the front forks were replaced.

Correct bolt P/N 90-08134 M10x55x1.25. Incorrect bolt P/N 90-08142 M10x60x1.5. This is only used on the FST platform product line.

5/11/22 Quality and Production engineering screened all hardware at the production station. It was found that 90-08142 were mixed in with 90-08134. The hardware bins were clearly marked as 90-08134. Warehouse personnel inspected inventory of P/N 90-08134 and found P/N 90-8142 mixed in the box in the warehouse. Quality and Production engineering inspected the warehouse and found that boxes of 90-08134 and boxes of the 90-08142 were next to each other on the same shelf. Production engineering removed the remaining 90-08142 from inventory and moved them to the intended assembly station. The location for 90-08142 has also been moved to a different warehouse location to avoid future mix-ups.

5/11/22 Quality and Production engineering inspected all FST bikes still in WIP (production line). A second bike VIN#21642 was found to have the wrong bolt installed in one of the forks. VIN#21642 was removed from the production line and the fork was replaced. This second bike prompted Quality engineering to expand the investigation to a larger scope of FST bikes.

5/12/22 to 5/20/22 Warehouse bin fill log showed a gap in bin fill intervals back to 4/28/22. Quality engineering pulled all 65 FST bikes that went through station VB06 between 4/28/22 to 5/10/22. Of the 65 FST bikes inspected, one more FST bike VIN#21540 was found to have the incorrect bolt installed in one of the forks.

#### **Description of Remedy :**

Description of Remedy Program :	Zero Motorcycles dealers will inspect and, if necessary, replace the front brake caliper bolts and forks on affected motorcycles. Dealers will then submit a warranty claim for the parts and labor related to the replacement. The labor time for inspection is .25 and replacement is 0.30 hours (per fork). Zero Motorcycles has not developed a separate reimbursement plan for this recall because all the motorcycles are under warranty, and no owner should have paid for this repair out of pocket.
<b>v 1</b>	The incorrect bolts (p/n 90-08142 - HEX FLANGE BOLT STAR DRIVE PER ZM 88-08813 M10X60 8.8 ZM-F-01 ZM-L-02) are 60mm long with course threads (1.5mm pitch). The correct bolts (p/n 90-08134 - HEX FLANGE BOLT STAR DRIVE PER ZM 88-08813 M10X55X1.25 THREAD 10.9 ZM- F-01 ZM-L-02) are 55mm long and with fine threads (1.25mm pitch).
	Zero Motorcycles production and logistics teams removed the recalled bolts from the production line on May 11, 2022 and they were immediately replaced with the correct bolts. Additional inspection requirements were confirmed with the Final Quality Inspection team on May 12, 2022.

#### **Recall Schedule :**

Description of Recall Schedule : Zero Motorcycles expects to notify its dealer network no later than the

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	week of June 20, 2022 and motorcycle owners no later than the week of
	June 27, 2022.
Planned Dealer Notification Date :	JUN 20, 2022 - JUN 30, 2022
Planned Owner Notification Date :	JUN 27, 2022 - JUL 05, 2022

\* NR - Not Reported

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