OMB Control No.: 2127-0004

Part 573 Safety Recall Report

20V-640

Manufacturer Name: Zero Motorcycles Inc.

Submission Date: APR 16, 2021 NHTSA Recall No.: 20V-640

Manufacturer Recall No.: SV-ZMC-021-019



Manufacturer Information:

Manufacturer Name: Zero Motorcycles Inc.

Address: 380 El Pueblo Road

Scotts Valley CA 95066

Company phone: 831-438-3500

Population:

Number of potentially involved : 64 Estimated percentage with defect : 100 %

Vehicle Information:

Vehicle 1: 2021-2021 Zero Motorcycles SR, S, DSR, DS, FX, FXS

Vehicle Type: MOTORCYCLES

Body Style : Power Train : NR

Descriptive Information: The population was determined from a review of revision B DC-DC converter serial

numbers provided by the component manufacturer and recorded by Zero

Motorcycles during the motorcycle manufacturing process. The correct revision A DC-DC converter was installed in motorcycles not included in the recall. A total of 64 motorcycles were determined to have these serial numbers which represented the

incorrect Revision B.

Production Dates: AUG 19, 2020 - OCT 05, 2020

Description of Defect:

Description of the Defect: The subject motorcycles were assembled with a DC-DC converter that has

insufficient power output margin. A DC-DC converter is used to convert the motorcycle's battery pack voltage (89-116 VDC) to 12 VDC in order to provide power for the motorcycle's lights, indicators, instruments, its anti-lock braking system (ABS), and any accessories that are connected by the user to the

motorcycle's accessory outlet.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: If a DC-DC converter does not have enough power output margin to support

all power demands, it may temporarily shut off when its power capacity is exceeded with no warning to the rider. Should this occur during an ABS event, the ABS and all vehicle lights would temporarily stop functioning, which

could increase the risk of a crash.

Description of the Cause: The manufacturer of the component shipped a new revision B of their DC-DC

converter with improper labeling, which resulted in its improper use in the

manufacture of motorcycles.

Identification of Any Warning None

that can Occur:

Involved Components:

Component Name 1: DC-DC CONV BORGWARNER 622-11213 REV B

Component Description: DC-DC CONV BORGWARNER 622-11213 REV B

Component Part Number: 45-08288-01

Supplier Identification:

Component Manufacturer

Name: Borg Warner Southborough Inc.

Address: 155 Northboro Road, Suite 1

Southborough Massachusetts 01772

Country: United States

Chronology:

On October 3, 2020, the Zero Motorcycles Quality team discovered that some revision B DC-DC converters had been received under the revision A part number. By October 5, 2020, all revision B DC-DC converters were quarantined and production with this component was stopped. On October 5, 2020 Zero Motorcycles requested that the component manufacturer provide a list of all revision B serial numbers so that an investigation of motorcycles records could be conducted to determine if any had been released for sale. The list of serial numbers was provided by the component manufacturer on October 8, 2020. On October 9, 2020, the Quality Team confirmed that motorcycles had been released for sale. On October 13, 2020, the Product Integrity Team at Zero Motorcycles confirmed that the use of the revision B on the subject motorcycle was a safety issue, and recommended the Company take steps to pursue a recall.

Description of Remedy:

Description of Remedy Program: Zero Motorcycles dealers will the replace the revision B DC-DC converters with a revision A. Dealers will then submit a warranty claim for the part and labor related to the replacement. The labor time for replacement is 1.5 hours.

from Recalled Component:

How Remedy Component Differs The remedy component has a label marked with the words, "Revision A." The recalled component has a label that is marked with the words, "Revision B." Zero Motorcycles has separate part numbers for the Revision A (60-07190-01) versus the Revision B (45-08288-01).

Identify How/When Recall Condition On October 3, 2020, the Zero Motorcycles Quality team discovered that was Corrected in Production: some revision B DC-DC converters had been received under the revision A part number. By October 5, 2020, all revision B DC-DC converters were quarantined and production with this component was stopped. Production of motorcycles with the correct revision A DC-DC converter was resumed that same day. Any motorcycles built with the incorrect DC-DC converter, but not yet sold, are having that component replaced by the production team.

Recall Schedule:

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

week of October 26, 2020 and motorcycle owners no later than the week

of November 2, 2020.

Planned Dealer Notification Date: OCT 26, 2020 - NOV 09, 2020 Planned Owner Notification Date: NOV 02, 2020 - NOV 16, 2020

^{*} NR - Not Reported