

# Part 573 Safety Recall Report

# 20V-704

**Manufacturer Name :** Zero Motorcycles Inc.**Submission Date :** NOV 13, 2020**NHTSA Recall No. :** 20V-704**Manufacturer Recall No. :** SV-ZMC-021-020**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 : 659

Estimated percentage with defect : 100 %

**Vehicle Information :**

Vehicle 1 : 2020-2020 Zero SR/F and SR/S

Vehicle Type : MOTORCYCLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : The population consists of all Model Year 2020 Zero SR/F and Zero SR/S model motorcycles.

Production Dates : FEB 14, 2019 - JUN 19, 2020

VIN Range 1 : Begin : 538ZFAZ73LCK11327 End : 538ZFBZ77LCL15258  Not sequential**Description of Defect :**

Description of the Defect : The subject motorcycles were assembled with a front brake switch manufactured with improper glue that may allow water intrusion, which can increase the switch resistance over time and potentially lead to the loss of operation of the switch.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If the front brake switch fails to operate, the rear brake light will not illuminate when the rider applies the front brake only; it will still illuminate if the rear brake is applied. If the motorcycle is in cruise control mode and the front brake switch fails to operate, the cruise control mode will not be interrupted by the application of the front brake only; it will still be interrupted by the application of the rear brake or by pressing the cruise control button. Either of these conditions could increase the risk of a crash.

Description of the Cause : The manufacturer of the front brake switch used improper glue that is susceptible to water intrusion. As a result, the switch resistance may increase over time to a level where it no longer operates.

Identification of Any Warning : Per the "pre-ride inspection" specified in Zero motorcycles Owners' Manuals,

that can Occur : the rider should note that the rear brake light does not illuminate when the front brake is applied.

## Involved Components :

Component Name 1 : BRAKE LIGHT SWITCH FRONT RADIAL MASTER CYLINDER

Component Description : BRAKE LIGHT SWITCH FRONT RADIAL MASTER CYLINDER

Component Part Number : 25-08164

## Supplier Identification :

### Component Manufacturer

Name : J.Juan

Address : Poligono Industrial Cami Ral

C/Miquel Servet, 21-23 Gava (Barcelona) FOREIGN STATES 08850

Country : Spain

## Chronology :

Zero Motorcycles received an initial field report of a front brake switch failure in July 2019. In August 2019, a non-conforming material report along with samples of the few field failures were provided to the component manufacturer for further analysis. Testing completed by November 2019 and reviewed with the component manufacturer was inconclusive. Meeting with the component manufacturer were repeated in January 2020 and February 2020. Additional failed components from the few field failures were sent to the component manufacturer for further analysis.

On September 29, 2020, the Product Integrity Team at Zero met to review available data and requested that additional analysis be conducted by the manufacturer. On November 2, 2020, the switch manufacturer submitted to Zero their conclusion on the use of improper glue that could allow water intrusion as the root cause of the observed switch failures. On November 10, 2020, the Product Integrity Team at Zero met to review this information, concluded that this was a safety concern, and recommended that the Company take steps to pursue a safety recall.

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

## Description of Remedy :

**Description of Remedy Program :** Zero Motorcycles dealers will the replace the recalled front brake switch with a remedy front brake switch. Dealers will then submit a warranty claim for the part and labor related to the replacement. The labor time for replacement is 0.5 hours.

**How Remedy Component Differs from Recalled Component :** The remedy component has proper glue that does not deteriorate over time, and a white button with a red bezel. The recalled component has the improper glue, and a white button with a black bezel. Zero Motorcycles has separate part numbers for the remedy switch, which is part number 25-08044 - JJUAN FRONT MASTER CYLINDER BRAKE LIGHT SWITCH SDS versus the recalled switch.

**Identify How/When Recall Condition was Corrected in Production :** With the start of the Model Year 2021 Zero SR/F and Zero SR/S model motorcycles production on July 16, 2020, Zero Motorcycles implemented a different rear brake light signaling approach in the actuation of the front brake that doesn't rely solely on the front brake switch; it also uses a parallel signal from the hydraulic control unit (HCU).

## Recall Schedule :

**Description of Recall Schedule :** Zero Motorcycles expects to notify its dealer network no later than the week of November 23, 2020 and motorcycle owners no later than the week of November 30, 2020.

**Planned Dealer Notification Date :** NOV 16, 2020 - NOV 27, 2020

**Planned Owner Notification Date :** NOV 30, 2020 - DEC 11, 2020

\* NR - Not Reported