

Part 573 Safety Recall Report

22V-175

Manufacturer Name : Arcimoto Inc**Submission Date :** MAY 04, 2022**NHTSA Recall No. :** 22V-175**Manufacturer Recall No. :** NR**Manufacturer Information :**

Manufacturer Name : Arcimoto Inc

Address : 2034 W. 2nd Ave
Eugene OR 97402

Company phone : 5416836293

Population :

Number of potentially involved : 516

Estimated percentage with defect : 1 %

Vehicle Information :

Vehicle 1 : 2019-2022 Arcimoto FUV

Vehicle Type : MOTORCYCLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : Affects all five-hundred sixteen MY2019 - MY2022 vehicles (fifty-seven MY2019 T-FUV, one-hundred twenty-six MY2020 T-FUV, six MY2020 D-Deliverator-1, four MY2021 Roadster, one MY2021 E-Rapid Responder, two-hundred sixty-five MY2021, twenty-three MY2021 D-Deliverator-1, twenty-one MY2021 Roadster T-FUV, and 15 MY2022) produced from 09/19/2019 through to 03/21/22.

Production Dates : SEP 19, 2019 - MAR 21, 2022

VIN Range 1 : Begin :	7F7ATR312KER00000	End :	7F7ATR317KER00056	<input type="checkbox"/> Not sequential
VIN Range 2 : Begin :	7F7ATR312LER00001	End :	7F7ATR310LER00126	<input type="checkbox"/> Not sequential
VIN Range 3 : Begin :	7F7ATR310MER00001	End :	7F7ATR318MER00182	<input type="checkbox"/> Not sequential
VIN Range 4 : Begin :	7F7ATR311MER00184	End :	7F7ATR313MER00185	<input type="checkbox"/> Not sequential
VIN Range 5 : Begin :	7F7ATR317MER00187	End :	7F7ATR314MER00194	<input type="checkbox"/> Not sequential
VIN Range 6 : Begin :	7F7ATR311MER00198	End :	7F7ATR313MER00221	<input type="checkbox"/> Not sequential
VIN Range 7 : Begin :	7F7ATR317MER00223	End :	7F7ATR310MER00239	<input type="checkbox"/> Not sequential
VIN Range 8 : Begin :	7F7ATR310MER00242	End :	7F7ATR314MER00244	<input type="checkbox"/> Not sequential
VIN Range 9 : Begin :	7F7ATR31XMER00247	End :	7F7ATR31XMER00247	<input type="checkbox"/> Not sequential
VIN Range 10 : Begin :	7F7ATR313MER00249	End :	7F7ATR314MER00275	<input type="checkbox"/> Not sequential
VIN Range 11 : Begin :	7F7ATR319NER00001	End :	7F7ATR314NER00004	<input type="checkbox"/> Not sequential
VIN Range 12 : Begin :	7F7ATR31XNER00007	End :	7F7ATR313NER00012	<input type="checkbox"/> Not sequential
VIN Range 13 : Begin :	7F7ATR319NER00015	End :	7F7ATR312NER00017	<input type="checkbox"/> Not sequential
VIN Range 14 : Begin :	7F7ATR316NER00019	End :	7F7ATR312NER00020	<input type="checkbox"/> Not sequential

Vehicle 2 : 2020-2022 Arcimoto Deliverator

Vehicle Type : MOTORCYCLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : Affects all five-hundred sixteen MY2019 - MY2022 vehicles (fifty-seven MY2019 T-FUV, one-hundred twenty-six MY2020 T-FUV, six MY2020 D-Deliverator-1, four MY2021 Roadster, one MY2021 E-Rapid Responder, two-hundred sixty-five MY2021, twenty-three MY2021 D-Deliverator-1, twenty-one MY2021 Roadster T-FUV, and 15 MY2022) produced from 09/19/2019 through to 03/21/22.

Production Dates : JAN 01, 2021 - MAR 21, 2022

VIN Range 1 : Begin : 7F7ADR316LER00001 End : 7F7ADR315LER00006 Not sequential

VIN Range 2 : Begin : 7F7ADR314MER00001 End : 7F7ADR313MER00023 Not sequential

Vehicle 3 : 2020-2022 Arcimoto Roadster

Vehicle Type : MOTORCYCLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : Affects all five-hundred sixteen MY2019 - MY2022 vehicles (fifty-seven MY2019 T-FUV, one-hundred twenty-six MY2020 T-FUV, six MY2020 D-Deliverator-1, four MY2021 Roadster, one MY2021 E-Rapid Responder, two-hundred sixty-five MY2021, twenty-three MY2021 D-Deliverator-1, twenty-one MY2021 Roadster T-FUV, and 15 MY2022) produced from 09/19/2019 through to 03/21/22.

Production Dates : JAN 01, 2020 - MAR 21, 2022

VIN Range 1 : Begin : 7F7ARR314LER00001 End : 7F7ARR31XLER00004 Not sequential

VIN Range 2 : Begin : 7F7ARR312MER00001 End : 7F7ARR316MER00020 Not sequential

Vehicle 4 : 2021-2022 Arcimoto Rapid Responder

Vehicle Type : MOTORCYCLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : Affects all five-hundred sixteen MY2019 - MY2022 vehicles (fifty-seven MY2019 T-FUV, one-hundred twenty-six MY2020 T-FUV, six MY2020 D-Deliverator-1, four MY2021 Roadster, one MY2021 E-Rapid Responder, two-hundred sixty-five MY2021, twenty-three MY2021 D-Deliverator-1, twenty-one MY2021 Roadster T-FUV, and 15 MY2022) produced from 09/19/2019 through to 03/21/22.

Production Dates : JAN 01, 2021 - MAR 21, 2022

VIN Range 1 : Begin : 7F7AER318MER00001 End : 7F7AER318MER00001 Not sequential

Description of Defect :

Description of the Defect : The brake pressure switches are experiencing intermittent failures, caused by the brake pressure sensor remaining closed, due to salt water and other chemicals found in de-icers. This results in the brake lights remaining in a constant on state.

FMVSS 1 : 122 - Motorcycle brake systems

FMVSS 2 : NR

Description of the Safety Risk : Brake lights are an important part of the brake warning system. If the brake lights are not functioning properly there is no way for other vehicles on the road to know if your vehicle is coming to a stop or not. When this system is not working properly it increases the risk of the vehicle being involved in a crash.

Description of the Cause : The brake pressure switch lacked dielectric grease in the connectors. This allowed salt water and winter de-icers the ability to saturate the connectors. This caused a disruption in the connectors that allowed the rear brake lights to remain open in certain cases which caused the brake lights themselves to remain on.

Identification of Any Warning that can Occur : None.

Involved Components :

Component Name 1 : Brake Pressure Switch (001063)

Component Description : Brake Pressure Switch

Component Part Number : 001063

Supplier Identification :

Component Manufacturer

Name : Hayes Performance Systems

Address : 5800 W Donges Bay Rd
Mequon Wisconsin 53092

Country : United States

Chronology :

Beginning on January 26, the Service dept noticed an increased pattern with FUV and how the rear brake lights

would remain on regardless if the brake pedal was engaged or not. On February 10th the details of the discovered defect were reported to the quality and Regulatory dept. The defect was not only a non-compliance issue affecting the brake system, but there was also an increased safety risk, due to the confusion this would cause to other drivers following Arcimoto vehicles. If the brake lights always remain on, this could result in a crash. A problem communication meeting was called on February 17th with members of the Arcimoto Service, Eng, Quality and the Reg teams. The group met to discuss the seriousness of the reported defect. After the meeting a hold was recommended to Arcimoto's Exec team to prevent any further production of vehicles until a remedy could be implemented. The Service, Quality and the Engineering teams began investigating the defect and proposed that perhaps it involved the brake pressure sensor. There had been reports in the past of the connection for the brake pressure sensor becoming corroded and dielectric grease was recommended to eliminate the problem from the corrosion. The investigation continued for several weeks as members of the Quality and the Service team attempting to replicate the defect. On March 3rd, there was a development in the investigation and the Quality team was able to replicate the problem by using a 3 to 5 percent salt water spray on the connector of the brake pressure sensor. This was able to be successfully replicated on other vehicles in the fleet. This did not explain the population of vehicles that were not exposed to saltwater or air conditions. After checking with the Oregon Department of Transportations it was confirmed that the chemicals in the deicer would also cause the same interruption in the brake pressure sensor switches connection. On March 17 after more testing the root cause was confirmed

Description of Remedy :

Description of Remedy Program : Owners will be notified by mail and instructed to contact Arcimoto to schedule a service appointment to have the brake pressure switch inspected and have the dielectric grease added to the connection to prevent the brake lights from remaining on. There will be no charge to vehicle owners for this service. To the best of our knowledge, no owners have incurred any costs resulting from this defect.

How Remedy Component Differs from Recalled Component : With no sealable option for such a connector to mate with a blade type terminals on the switch side of the brake pressure sensor connection, outside elements such as salt water and other chemicals found in de-icers can interfere with the brake sensor switch connectors. A dielectric grease will be added to the connection to prevent the outside elements from interfering with the connection.

Identify How/When Recall Condition was Corrected in Production : Beginning on March 23, 2022 an engineering change was made to require the use of the dielectric grease on the brake pressure switch during production so that this will fix the problem with the corrosion and the other environmental chemicals from disrupting the connection in the switch and causing it to remain closed.

Recall Schedule :

Description of Recall Schedule : Arcimoto does not intend to send any dealer or distributor notifications, as it has neither dealers nor distributors at this time.

Planned Dealer Notification Date : MAY 02, 2022 - MAY 09, 2022

Planned Owner Notification Date : MAY 02, 2022 - MAY 09, 2022

* NR - Not Reported