

Part 573 Safety Recall Report

22V-507

Manufacturer Name : Arcimoto Inc**Submission Date :** JUL 15, 2022**NHTSA Recall No. :** 22V-507**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 : 581

Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2020-2022 Arcimoto Roadster

Vehicle Type : MOTORCYCLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : Affects five-hundred and eighty-one MY2019 - MY2022 vehicles (fifty-seven MY2019 T-FUV, one-hundred twenty-six MY2020 T-FUV, six MY2020 D-Deliverator-1, four MY2020 R-Roadster, one MY2021 E-Rapid Responder, twenty-three MY2021 R-Roadster, twenty MY 2021 Deliverators, two-hundred seventy-five MY2021 T-FUV, and sixty-nine MY2022 T-FUV) produced from 09/19/2019 through to 06/07/2022.

Production Dates : JAN 01, 2020 - JUN 07, 2022

VIN Range 1 : Begin : 7F7ARR314LER00001 End : 7F7ARR31XLER00004

☐ Not sequential

VIN Range 2 : Begin : 7F7ARR312MER00001 End : 7F7ARR316MER00020

☐ Not sequential

Vehicle 2 : 2019-2022 Arcimoto FUV

Vehicle Type : MOTORCYCLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : Affects five-hundred and eighty-one MY2019 - MY2022 vehicles (fifty-seven MY2019 T-FUV, one-hundred twenty-six MY2020 T-FUV, six MY2020 D-Deliverator-1, four MY2020 R-Roadster, one MY2021 E-Rapid Responder, twenty-three MY2021 R-Roadster, twenty MY 2021 Deliverators, two-hundred seventy-five MY2021 T-FUV, and sixty-nine MY2022 T-FUV) produced from 09/19/2019 through to 06/07/2022.

Production Dates : SEP 19, 2021 - JUN 07, 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 : 7F7ATR314MER00275	<input type="checkbox"/> Not sequential
VIN Range 4 : Begin : 7F7ATR319NER00001	End : 7F7ATR314NER00035	<input type="checkbox"/> Not sequential
VIN Range 5 : Begin : 7F7ATR318NER00037	End : 7F7ATR315NER00044	<input type="checkbox"/> Not sequential
VIN Range 6 : Begin : 7F7ATR319NER00046	End : 7F7ATR318NER00054	<input type="checkbox"/> Not sequential
VIN Range 7 : Begin : 7F7ATR315NER00058	End : 7F7ATR313NER00060	<input type="checkbox"/> Not sequential
VIN Range 8 : Begin : 7F7ATR317NER00062	End : 7F7ATR31XNER00069	<input type="checkbox"/> Not sequential
VIN Range 9 : Begin : 7F7ATR310NER00078	End : 7F7ATR312NER00079	<input type="checkbox"/> Not sequential
VIN Range 10 : Begin : 7F7ATR312NER00082	End : 7F7ATR314NER00083	<input type="checkbox"/> Not sequential
VIN Range 11 : Begin : 7F7ATR31XNER00086	End : 7F7ATR31XNER00086	<input type="checkbox"/> Not sequential
VIN Range 12 : Begin : 7F7ATR313NER00091	End : 7F7ATR313NER00091	<input type="checkbox"/> Not sequential

Vehicle 3 : 2020-2022 Arcimoto Deliverator

Vehicle Type : MOTORCYCLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : Affects five-hundred and eighty-one MY2019 - MY2022 vehicles (fifty-seven MY2019 T-FUV, one-hundred twenty-six MY2020 T-FUV, six MY2020 D-Deliverator-1, four MY2020 R-Roadster, one MY2021 E-Rapid Responder, twenty-three MY2021 R-Roadster, twenty MY 2021 Deliverators, two-hundred seventy-five MY2021 T-FUV, and sixty-nine MY2022 T-FUV) produced from 09/19/2019 through to 06/07/2022.

Production Dates : JAN 01, 2020 - JUN 07, 2022

VIN Range 1 : Begin : 7F7ADR316LER00001	End : 7F7ADR315LER00006	<input type="checkbox"/> Not sequential
VIN Range 2 : Begin : 7F7ADR314MER00001	End : 7F7ADR313MER00023	<input type="checkbox"/> Not sequential

Vehicle 4 : 2021-2021 Arcimoto Rapid Responder

Vehicle Type : MOTORCYCLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : Affects five-hundred and eighty-one MY2019 - MY2022 vehicles (fifty-seven MY2019 T-FUV, one-hundred twenty-six MY2020 T-FUV, six MY2020 D-Deliverator-1, four MY2020 R-Roadster, one MY2021 E-Rapid Responder, twenty-three MY2021 R-Roadster, twenty MY 2021 Deliverators, two-hundred seventy-five MY2021 T-FUV, and sixty-nine MY2022 T-FUV) produced from 09/19/2019 through to 06/07/2022.

Production Dates : JAN 01, 2021 - DEC 31, 2021

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

Description of Defect :

Description of the Defect : The HV Control Cover interferes w/ the HVBB Connector of the HV-Harness, which prevents the harness connector from latching fully with the mating plug. The HV Control Board Cover does not have enough relief clearance cut into it to allow the latch to fully engage.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : There is a safety risk that if the HV/Harness connector is not properly latched at the time of assembly, the HV/Harness Connector, unknowingly to the operator, could dislodge itself. This dislodging would result in a sudden loss of power steering and traction power, which will make the vehicle more difficult to control and increase the likelihood of a crash.

Description of the Cause : In 2019, the cover was changed from a machined cover to injection molding; there was supposed to be a recess in the HV Control Board created at that time that would allow for full engagement of the latching mechanism for the HV/Harness. However, this recess was omitted.

Identification of Any Warning that can Occur : A yellow 12V warning light will illuminate on the display of the vehicle to indicate a DC/DC inverter disconnect. The yellow indicator light will eventually turn to red, at which point a loss of power steering and traction power will occur.

Involved Components :

Component Name 1 : 003618 HV Board Control Cover

Component Description : HV-Modules cover

Component Part Number : 003618

Component Name 2 : 003438 HV Board Connector

Component Description : HV Board

Component Part Number : 003438

Component Name 3 : 003342 Harness Connector

Component Description : Harness Connector

Component Part Number : 003342

Supplier Identification :

Component Manufacturer

Name : Arcimoto

Address : 2034 W 2nd Ave

Eugene Oregon 97402

Country : United States

Chronology :

On June 2nd, 2022, Arcimoto's production line identified an issue with a HV/Harness Connector being unable to fully engage with the latching mechanism. This lack of engagement allowed the connector to become dislodged over time. There were no previous customer complaints, field reports, or warranty claims before the discovery on June 2nd. A safety management meeting was called to discuss the next steps to take. It was decided that more testing should be done to determine just how likely the HV/Harness Connector could become disengaged without being properly engaged over time. A High Accelerated Life Test (HALT) was conducted by the Quality Department to simulate real life conditions. The test results showed that there is significant probability that the connection could disengage over time, resulting in the worst case scenario of losing power steering and traction power. On June 7th, the production line began using the HV Control Board Covers with the recess to allow for proper latching. On July 8th, after the test data came back showing proof of the safety risk, Arcimoto Executives and Safety Committee Members voted unanimously to conduct a voluntary recall and notify NHTSA of our findings and decision.

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 their HV Control Board cover replaced with a new cover that will be properly machined to allow the recess for the latching mechanism.

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.

There will be no reimbursement plan as Arcimoto trained technicians are the only ones allowed to repair this defect.

How Remedy Component Differs from Recalled Component : The new HV Control Cover will be properly machined to include the necessary relief on the cover which will allow full engagement of the latching mechanism and prevent the HV/Harness Connector from dislodging from its connection.

Identify How/When Recall Condition was Corrected in Production : On June 7th, 2022, the Manufacturing department began using only the correctly machined HV Board Control Covers with the relief properly cut in the lid to allow the HV/Harness connector to fully engage with the latching mechanism.

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 : AUG 04, 2022 - AUG 11, 2022

Planned Owner Notification Date : AUG 04, 2022 - AUG 04, 2022

* NR - Not Reported