OMB Control No.: 2127-0004

# Part 573 Safety Recall Report

## 18V-939

Manufacturer Name: Arcimoto Inc Submission Date: OCT 30, 2019 NHTSA Recall No.: 18V-939

**Manufacturer Recall No.:** 7F7-W3A5M-12



#### **Manufacturer Information:**

Manufacturer Name: Arcimoto Inc

Address: 2034 W. 2nd Ave

Eugene OR 97402

Company phone: 5958232

### **Population:**

Number of potentially involved: 23 Estimated percentage with defect: 100 %

#### **Vehicle Information:**

Vehicle 1: 2017-2018 Arcimoto FUV

Vehicle Type: MOTORCYCLES

**Body Style: OTHER** 

Power Train: HYBRID ELECTRIC

Descriptive Information: The recall population consists of all twenty three FUV vehicles built by Arcimoto, Inc.

that were either sold, or used on public roads or both. These vehicles may have a

seating system that may be insufficient for certain drivers.

Production Dates: NOV 01, 2017 - DEC 21, 2018

#### **Description of Defect:**

Description of the Defect: During a simulated 35 mph crash with a 95 percentile male dummy, the driver

seat collapsed, causing the dummy to submarine, thus preventing the seatbelts

from holding the dummy in place.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: The defect may result in additional injuries during a crash.

Description of the Cause: Collapse of the seat bottom. Both the hard shell and the foam in the seat

contributed to this problem. The hard shell of the seat bent downwards during the collision whereas the seat foam compressed downwards. This combination resulted in the crash dummy submarining with potential injuries to lower

extremities and internal organs.

Identification of Any Warning No warning precedes this defect.

that can Occur:

#### **Supplier Identification:**

#### **Component Manufacturer**

Name: NR Address: NR

NR

Country: NR

#### **Chronology:**

As part of ongoing development, Arcimoto continuously runs calibrated test simulations of various scenarios. During a simulated test, it was discovered that in one scenario, a simulated crash with a 95 percentile male dummy, the driver seat collapsed, causing the dummy to submarine, thus preventing the seatbelts from holding the dummy in place. This simulation took place in late September 2018.

Further analysis of this scenario showed that both the hard shell and the foam in the seat contributed to this problem. Analysis of additional aspects is still ongoing and investigations on how this situation can be remedied are underway.

At this point, a definitive solution is not yet available. Work on a definitive solution is in progress.

This issue was discussed with the Review Board on 12/18/2018, who escalated this to the PCM Group. The PCM Group met on 12/20/2018 and decided to escalate this as a recall candidate. Senior Management approved the recall on 12/21/2018.

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

Description of Remedy Program: The defect will be remedied by replacing the subject vehicle with a fully

compliant vehicle, including numerous design improvements to the seat and seat base design. This will be done free of charge to purchasers and owners. To the best of our knowledge, no owners have incurred any costs

as a result of this defect.

How Remedy Component Differs The new vehicles have been completely redesigned to address the from Recalled Component: structural integrity issues evidenced in the sled test. Retesting was

performed to ensure that the design changes addressed the previously

observed issues.

Identify How/When Recall Condition Production resumed with a completely new vehicle design, including,

was Corrected in Production: frame, seat belt configuration, seats, and seat support structure.

#### **Recall Schedule:**

Description of Recall Schedule: Arcimoto has retrieved all vehicles subject to this recall. All vehicles are

currently under Arcimoto control and will not be returned to their owners or used on public roads until all recalls have been completed by

Arcimoto.

Planned Dealer Notification Date : NR - NR Planned Owner Notification Date : NR - NR

\* NR - Not Reported