

Part 573 Safety Recall Report

20V-136

Manufacturer Name : Arcimoto Inc**Submission Date :** MAR 13, 2020**NHTSA Recall No. :** 20V-136**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 : 66

Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2019-2020 Arcimoto FUV

Vehicle Type : MOTORCYCLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : Affects sixty-six (66) total vehicles produced through 02/17/2020: fifty-six (56) vehicles in MY2019 and ten (10) vehicles in MY2020.

Production Dates : SEP 19, 2019 - FEB 17, 2020

VIN Range 1 : Begin : 7F7ATR312KER00000	End : 7F7ATR316KER00050	<input type="checkbox"/> Not sequential
VIN Range 2 : Begin : 7F7ATR31XKER00052	End : 7F7ATR317KER00056	<input type="checkbox"/> Not sequential
VIN Range 3 : Begin : 7F7ATR312LER00001	End : 7F7ATR316LER00003	<input type="checkbox"/> Not sequential
VIN Range 4 : Begin : 7F7ATR31XLER00005	End : 7F7ATR313LER00007	<input type="checkbox"/> Not sequential
VIN Range 5 : Begin : 7F7ATR317LER00009	End : 7F7ATR317LER00009	<input type="checkbox"/> Not sequential
VIN Range 6 : Begin : 7F7ATR317LER00012	End : 7F7ATR317LER00012	<input type="checkbox"/> Not sequential
VIN Range 7 : Begin : 7F7ATR312LER00015	End : 7F7ATR314LER00016	<input type="checkbox"/> Not sequential

Description of Defect :

Description of the Defect : Improperly crimped large-gauge cable-lugs on completed traction-power harnesses that are unable to withstand any tension-test.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : High resistance, resulting in intermittent power, localized high heat, arcing, risk of fire, and loss of traction-power.

Description of the Cause : For harnesses produced in-house:
Engineering: unfamiliarity of different cable standards resulting in mismatched cable-lugs and cables;
Quality: lack of process validation and control including tension-testing;
Manufacturing: unfamiliarity with part and assembly process due to

insufficient training and long time period since affected harnesses were produced, worn crimper dies, inadequate force using manual crimper tool, disrepair of crimper tool.

For harnesses produced by an external supplier:

Quality: lack of process validation and control including tension-testing.

Identification of Any Warning that can Occur : None.

Supplier Identification :

Component Manufacturer

Name : MC Electronics

Address : 1891 Airway Drive
Hollister CALIFORNIA 95023

Country : United States

Chronology :

On Monday, February 17, 2020 in Manufacturing Electrical Assembly, uncrimped large-gauge cable-lugs were discovered on completed traction-power harnesses. It was determined that the uncrimped cable-lugs were limited to a batch started on Thursday, February 13, 2020, and all these harnesses were reworked. During this analysis of factory WIP and through tension-testing, incomplete and mis-crimped large-gauge cable-lugs were identified under heat-shrink tubing on other types of completed traction-power harnesses. On Monday, February 17, 2020, an immediate stop-ship and audit of assembled vehicles was undertaken to evaluate whether this issue potentially affected current production vehicles, and vehicle manufacturing and supplier production records were examined to determine the number and production dates of potentially affected vehicles. Based on the increasing number of cases, these audits determined all traction-power harnesses produced in-house and produced by an external supplier potentially had incomplete and mis-crimped cable-lugs under heat-shrink tubing, and therefore all vehicles produced were potentially affected.

Starting on February 17, 2020 and continuing through March 4, 2020, Engineering and Q&RA Departments performed research and analysis. Starting on February 24, 2020 and continuing through March 4, 2020, fully and partially assembled vehicles on the assembly line were reworked.

The Engineering and Q&RA Departments presented preliminary research and analysis findings to Arcimoto executives on Tuesday, February 18, 2020, and presented final research and analysis one week later. On Tuesday, February 25, 2020, Arcimoto decided to conduct a voluntary recall. Arcimoto is not aware of any reports of accident, injury, or fire related to this issue.

Description of Remedy :

Description of Remedy Program :	Owners will be notified by mail and instructed to contact Arcimoto to schedule a service appointment(s) to have their traction-power harnesses replaced. 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 :	Correctly crimped large-gauge cable-lugs on completed traction-power harnesses are able to withstand a tension-test of 300-lbs per UL-486A.
Identify How/When Recall Condition was Corrected in Production :	Starting on February 24, 2020, Engineering specified a cable standard for properly matched cable-lugs and cables; Quality implemented process validation and control including tension-testing to verify correctly crimped large-gauge cable-lugs on completed traction-power harnesses are able to withstand 300-lbs per UL-486A; Manufacturing introduced new die-sets, an automated crimper, and re-training of personnel on part and assembly process. Contributing factors were addressed and resolved the final week of February 2020. These changes apply to all subsequently produced vehicles. Arcimoto no longer uses the identified external supplier, currently all traction-power harnesses are produced in-house

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. Arcimoto anticipates NHTSA requiring ten business days to process this recall report, from March 9 through 20, 2020. After which, Arcimoto will submit a draft Owner Notification Letter for NHTSA's review during the week of March 23, 2020. The anticipated soonest date to send NHTSA-approved ONL is March 30, 2020
Planned Dealer Notification Date :	NR - NR
Planned Owner Notification Date :	MAR 30, 2020 - APR 03, 2020

* NR - Not Reported