

Part 573 Safety Recall Report

18V-944

Manufacturer Name : Arcimoto Inc
Submission Date : OCT 30, 2019
NHTSA Recall No. : 18V-944
Manufacturer Recall No. : 7F7-P4G2A-12

**Manufacturer Information :**

Manufacturer Name : Arcimoto Inc
Address : 2034 W. 2nd Ave
 Eugene OR 97402
Company phone : 5958232

Population :

Number of potentially involved : 14
Estimated percentage with defect : 70 %

Vehicle Information :

Vehicle 1 : 2018-2018 Arcimoto FUV
Vehicle Type : MOTORCYCLES
Body Style : OTHER
Power Train : HYBRID ELECTRIC

Descriptive Information : Fourteen vehicles may have potentially defective gearboxes. The recall population consists of all gearboxes assembled with castings machined by one specific sub-contractor.

Production Dates : JUL 02, 2018 - DEC 21, 2018

VIN Range 1 : Begin : 7F7ATR316JEB00009 End : 7F7ATR317JEB00018 Not sequential
VIN Range 2 : Begin : 7F7ATR315JEB00020 End : 7F7ATR310JEB00023 Not sequential

Description of Defect :

Description of the Defect : Out-of-control gearbox machining process causes eccentric bores, resulting in excessive side loads, casing bearing overheating and eventually gearbox breakdown.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : The defect may leave the operator without traction power in the middle of the highway.

Description of the Cause : Out-of-control gearbox machining process causes eccentric bores, resulting in excessive side loads, causing bearing overheating and eventually gearbox breakdown.

Identification of Any Warning that can Occur : The defect is accompanied by a loud, propeller-like noise from the gearbox.

Supplier Identification :

Component Manufacturer

Name : Wolcott Design Services
Address : 16650 NE Chehalem Drive
Newberg OREGON 97132
Country : United States

Chronology :

A single driving report on VIN 7F7ATR318JEB00013 indicating pulling and excessive noise in early October 2018 resulted in a teardown of the gearbox in this vehicle and a thorough inspection of the bearings, showing excessive wear. Detailed analysis by the bearing supplier and gear supplier combined with measurement of the gearbox center and side castings indicated eccentric bores. Further gearbox teardowns confirmed that the problem was present in several of the gearboxes assembled using machined castings from one specific supplier but not in castings from previous suppliers. The resulting FMEA report 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 gearbox. 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 from Recalled Component :	The recalled component was assembled using out-of-tolerance machined gearbox castings from one specific sub-contractor. The remedy replacement vehicle does not contain out-of-tolerance machined gearbox castings from this sub-contractor.
Identify How/When Recall Condition was Corrected in Production :	All machined gearbox castings from the defective batch have been quarantined. All replacement vehicles have parts that have been machined in house and were 100% measured to demonstrate conformance to specifications.

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