

Part 573 Safety Recall Report

17V-839

Manufacturer Name : MV Agusta USA, LLC**Submission Date :** JAN 12, 2018**NHTSA Recall No. :** 17V-839**Manufacturer Recall No. :** 18RC01**Manufacturer Information :**

Manufacturer Name : MV Agusta USA, LLC

Address : 10 Canal Street

Suite 224 Bristol PA 19007

Company phone : 215-781-1770

Population :

Number of potentially involved : 27

Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2015-2016 MV Agusta F4 RC and F4 RR

Vehicle Type : MOTORCYCLES

Body Style :

Power Train : NR

Descriptive Information : The supplier informed us of which front brake master cylinder pistons are synthetic (PPS = polyphenylene sulphide), being defective, as opposed to the aluminium ones, not defective. The recall population was determined based upon this information. The recall products differ by their synthetic front brake master cylinder pistons.

Production Dates : MAR 11, 2015 - SEP 29, 2015VIN Range 1 : Begin : ZCGNCFTWXGV006289 End : ZCGNCFTW7GV006296 Not sequentialVIN Range 2 : Begin : ZCGMCFTW0FV005906 End : ZCGMCFTW5FV006422 Not sequential**Description of Defect :**

Description of the Defect : Crack generation on the front brake master cylinder PPS (polyphenylene sulphide) piston connecting the internal pressure area to the external surface. The consequence is that the front brake may not participate in stopping the bike properly. The rear brake is not affected and works correctly.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If a crack through the piston occurs, the fracture connects the pressure chamber with the open air: in this condition the brake master cylinder is not able to generate enough pressure in the system and may reduce the braking system's effectiveness. As a result, braking can only be performed with the rear brake which may increase stopping distance significantly, which may increase the risk of injury to the rider and/or damage to property.

Description of the Cause : The anisotropy of the piston material, in addition to an unfavourable geometric distribution of porosity generated during the injection process, could lead to

the failure of the component (crack generation) subject to stress typical of mission profiles such as: use of the vehicle on race tracks, frequent ABS interventions, or vehicle ground fall.

Identification of Any Warning that can Occur : The failure may occur without any warning to the driver even though we cannot exclude a significant loss in brake effectiveness as an early symptom.

Supplier Identification :

Component Manufacturer

Name : BREMBO S.p.A.
Address : Via Brembo 25
CURNO (Bergamo) FOREIGN STATES 24035
Country : Italy

Chronology :

October 2016: Brembo now realizes that the above described condition may have first occurred during vehicle track use. No injuries reported. Brembo commenced the failure investigation.

February 2017: Since it was not possible to identify the failure mode during the investigation jointly conducted with the motorcycle manufacturer the investigation was concluded. Monitoring of the field has been agreed.

June 2017: A second field occurrence resulted in an investigation in which Brembo decided to introduce a preventative containment action on production replacing the PPS piston with an aluminium one (lead-time implementation of 2 months).

October 2017: Two additional field occurrences were reported (both on the motorbikes track). No injuries have been reported so far.

November 2017: Investigation closed: the root cause was identified as above (please refer to the "Describe the cause").

December 2017: Brembo decided to proceed with a word-wide safety recall campaign.

Description of Remedy :

Description of Remedy Program : Notification to customers and dealers are sent alerting them that a recall campaign is being initiated. Customers are instructed to bring their motorcycle to the nearest dealer to remedy the problem free of charge. Official dealers will replace the PPS piston with an aluminium one. Customers/dealers are reimbursed based on a typical warranty procedure.

How Remedy Component Differs from Recalled Component : NR

Identify How/When Recall Condition was Corrected in Production : The new piston is made from aluminium and machined from bar, guarantees a higher strength material as well as the absence of any possibility of porosity. This solution, already validated and in production for the past fifteen years, has proven to be fully reliable. In production line Brembo is now supplying the complete aluminium front brake master cylinder's piston since September 2017.

Recall Schedule :

Description of Recall Schedule : NR
Planned Dealer Notification Date : NR - NR
Planned Owner Notification Date : NR - NR

* NR - Not Reported