



Fuji Heavy Industries U.S.A., Inc.

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January 17, 2012
Ref. No.: GR12-002

Ms. Nancy Lummen Lewis
Associate Administrator for Enforcement,
National Highway Traffic Safety Administration
Attention: Recall Management Division (NVS-215)
1200 New Jersey Ave. SE
Washington, DC 20590

RE: Part 573 Defect Information Report – Increased Brake Pedal Travel Distance on 2012MY Subaru Impreza (except WRX/STI), Legacy and Outback Vehicles (Second Submission)

Dear Ms. Lewis,

In accordance with 49 CFR Part 573, "Defect and Noncompliance Responsibility and Reports," Fuji Heavy Industries USA, Inc. on behalf of Subaru of America, Inc. and Fuji Heavy Industries, Ltd., submits the enclosed notification and report concerning a defect in the Brake Master Cylinder on certain 2012 model year Subaru Impreza (except WRX/STI), Legacy and Outback vehicles sold in the United States. Our internal designation for this recall campaign will be: WVY-35.

The enclosed updates our previous response dated November 28, 2011 (Ref. No. GR11-080). Specifically, modifications are being made to the following sections of the report:

- **Page 2:** 573.6(c)(2)(i) - Identification of Vehicles Containing the Defect
 - Production dates updated
 - VIN range updated
- **Page 2:** 573.6(c)(3) - Total Number of Vehicles Potentially Containing the Defect
 - Number of vehicles potentially involved updated
- **Page 4:** 573.6(c)(8) - Description of the Manufacturer's Remedy Program
 - Response (including timeline) updated
- **Page 4:** 577.5(a) - Submission of Owner Notification Letter
 - Response (including timeline) updated

Note: The number of vehicles potentially involved has been upwardly revised by 726 units. All of these units were remedied prior to first retail sale; consequently, mailing of additional owner notification letters will not be necessary. Production of potentially defective vehicles ceased just prior to mailing of our previous response dated November 28, 2011 (Ref. No. GR11-080); therefore, it was difficult to provide a more accurate estimate of the recalled population at the time.

If you have any questions on the enclosed report, please contact me at (410) 884-4075
or jfro@subaru.com.

Sincerely,

A handwritten signature in black ink, appearing to read "John Frooshani".

John Frooshani
Safety Activities Manager
Government Relations
Fuji Heavy Industries USA, Inc.

Defect Information Report (49 CFR Part 573.6)

573.6(c)(1) - Manufacturer's Name

Vehicle Fabricating Manufacturers:

Fuji Heavy Industries, Ltd. ["FHI"]
1-7-2 Nishi-Shinjuku
Shinjuku-ku
Tokyo 160-8316, Japan

Subaru of Indiana Automotive, Inc. ["SIA"]
5500 State Road 38 East
Lafayette, Indiana 47903

Designated U.S. Agency:

Fuji Heavy Industries USA, Inc.
2235 Rt. 70 West
Cherry Hill, NJ 08002

573.6(c)(2)(i) - Identification of Vehicles Containing the Defect

Based on vehicle production records, we have determined from production dates that the recall affected passenger car population is as follows:

Make: Subaru

Model Year(s): 2012

Model(s): Impreza (except WRX/STI), Legacy and Outback vehicles

Production Dates:

- Impreza (except WRX/STI): April 21, 2011 through November 15, 2011
- Legacy: October 20, 2011 through November 23, 2011
- Outback: October 19, 2011 through November 23, 2011

VIN ranges:

- 2012 Impreza Sedan (except WRX/STI): JF1GJA*6*C*002001 through JF1GJA*6*C*010315
- 2012 Impreza Wagon (except WRX/STI): JF1GPA*6*C*200001 through JF1GPA*6*C*209617
- 2012 Legacy: 4S3BM**6*C*008608 through 4S3BM**6*C*015679
- 2012 Outback: 4S4BR**C*C*216490 through 4S4BR**C*C*232791

573.6(c)(3) - Total Number of Vehicles Potentially Containing the Defect

Model Year	Model	Numer of Vehicles Potentially Involved
2012	Impreza (Sedan + Wagon)	12,164
2012	Legacy/Outback	20,521
	Total	32,685

573.6(c)(4) - Percentage of Vehicles Estimated to Actually Contain the Defect

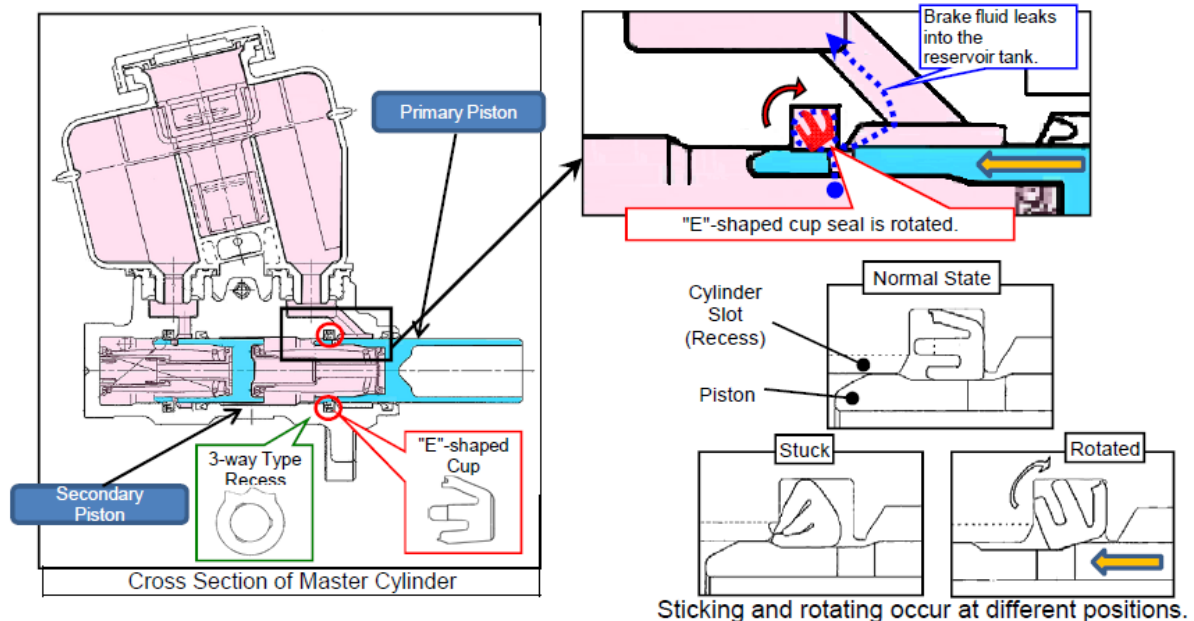
It is not possible to determine an estimated percentage of the affected vehicles that may actually experience this condition. We have received 3 confirmed technical reports of the problem from U.S.A. and Canada. 109 field reports in addition to the 3 confirmed technical reports were received. The majority of the reports were received from the dealer network and distribution centers.

573.6(c)(5) - Description of the Defect

(1) Evaluation result of returned parts

Investigation result of returned parts

As the "E"-shaped cup seal of the primary piston in the master cylinder rotates, brake fluid leaks into the reservoir tank.



(2) Failure occurrence mechanism

i) During production, the brake system is filled with hydraulic fluid using high pressure. This pressure collapses the "E"-shaped cup seal causing it to deform and get "stuck" in the cylinder slot recess (refer to the "stuck" picture in 573.6(c)(5)(1) above).

This event only occurs on the primary circuit. There is no impact on the secondary circuit.

ii) The "stuck" condition results in a force that pushes a portion of the E-shaped cup seal against the primary piston

iii) When the piston is actuated during braking, the piston moves left and the chamfer portion of it engages and rotates the "E"-shaped cup seal. This new orientation of the "E"-shaped cup seal compromises the hydraulic sealing of the system.

(3) Cause of the Defect

Design of the "E"-shaped cup seal cannot tolerate the process, during production, under which the brake system is filled with hydraulic fluid using high pressure.

(4) Consequence

In the failure mode described above, brake pedal travel distance will increase. The driver might misjudge the amount of brake pedal travel required to achieve the desired stopping distance, possibly resulting in a crash.

The service brake system will continue to comply with Federal Motor Vehicle Safety Standard (FMVSS) No. 135.

573.6(c)(6) - Chronology of Principal Events

- November 4th, 2011: FHI received an initial confirmed technical report of increased brake pedal travel from Subaru of America, Inc.
- November 5th, 2011: FHI started an investigation, which continued until November 23rd, 2011.
- November 24th, 2011: FHI concluded its investigation and determined that this condition relates to motor vehicle safety; accordingly, FHI will conduct a recall campaign.

573.6(c)(8) - Description of the Manufacturer's Remedy Program

- (i) The remedy plan calls for dealers to inspect, and if necessary, replace the master cylinder assembly with a new one that incorporates a proven cup seal design in place of the "E"-shaped cup seal design.
- (ii) Subaru of America, Inc. notified U.S. dealers on November 25, 2011. Mailing of owner notification letters began and was completed on December 5, 2011.

573.6(c)(10) - Submission of Recall Communications

Fuji Heavy Industries USA, Inc. will provide copies of all notices, bulletins and other recall related communications within 5 days after their distribution.

573.6(c)(11) - Manufacturer's Campaign Number

Our identification code for this recall campaign will be: WVY-35.

577.5(a) - Submission of Owner Notification Letter

A copy of the proposed owner notification letter was submitted to NHTSA's Recall Management Division for review on November 29, 2011. Final approval from NHTSA's Recall Management Division was received on December 2, 2011.