SUBARU.

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

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June 27, 2014 Ref. No.: GR14-042

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

<u>RE: Part 573 Defect Information Report – Brake Line Corrosion in Salt Belt States on 2005-2009MY</u> Subaru Legacy and Outback Vehicles, 2008-2011MY Subaru Impreza (except WRX/STI), 2008-2014MY Subaru Impreza WRX/STI, and 2009-2013MY Subaru Forester Vehicles (Second Submission)</u>

14V-311 Amended

(7 pages)

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 of the brake lines on certain 2005-2009 model year Subaru Legacy and Outback, 2008-2011 model year Subaru Impreza (except WRX/STI), 2008-2014MY Subaru Impreza WRX/STI, and 2009-2013 model year Subaru Forester vehicles sold in the United States. Our internal designation for this recall campaign is: WQK-47.

Note: The enclosed updates our previous submission dated June 10, 2014 (Ref. No. GR14-037).

Specifically, modifications were made to the following section of the report:

- Page 4: <u>573.6(c)(3) Total Number of Vehicles Potentially Containing the Defect</u>
 - o Number of potentially affected vehicles added

If you have any questions on the enclosed report, please contact me at (443) 430-3619 or <u>jfro@subaru.com</u>.

Sincerely,

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): 2005-2009 Model(s): Legacy and Outback vehicles that are currently or have ever been registered in the twenty (20) salt belt States (CT, DE, IA, IL, IN, MA, MD, ME, MI, MN, MO, NH, NJ, NY, OH, PA, RI, VT, WI, and WV) plus D.C. Production Dates:

Model Year	Model	Production Dates	
		Start-of-Production	End-of-Production
2005	Legacy	December 2003	May 2005
2006	Legacy	May 2005	June 2006
2007	Legacy	June 2006	March 2007
2008	Legacy	March 2007	April 2008
2009	Legacy	April 2008	April 2009
2005	Outback	December 2003	May 2005
2006	Outback	May 2005	June 2006
2007	Outback	June 2006	March 2007
2008	Outback	March 2007	April 2008
2009	Outback	April 2008	April 2009

Make: Subaru

Model Year(s): 2008-2011 Impreza (except WRX/STI); 2008-2014 Impreza WRX/STI **Model(s):** Impreza Sedan and Wagon (including WRX/STI) vehicles that are currently or have ever been registered in the twenty (20) salt belt States (CT, DE, IA, IL, IN, MA, MD, ME, MI, MN, MO, NH, NJ, NY, OH, PA, RI, VT, WI, and WV) plus D.C. **Production Dates:**

Model Year	Model	Production Dates	
		Start-of-Production	End-of-Production
2008	Impreza	April 2007	July 2008
2009	Impreza	June 2008	May 2009
2010	Impreza	May 2009	April 2010
2011	Impreza	March 2010	July 2011

Model Year	Model	Production Dates	
		Start-of-Production	End-of-Production
2008	Impreza WRX/STI	September 2007	June 2008
2009	Impreza WRX/STI	June 2008	May 2009
2010	Impreza WRX/STI	June 2009	April 2010
2011	Impreza WRX/STI	May 2010	August 2011
2012	Impreza WRX/STI	July 2011	June 2012
2013	Impreza WRX/STI	July 2012	June 2013
2014	Impreza WRX/STI	June 2013	February 2014

Make: Subaru

Model Year(s): 2009-2013

Model(s): Forester vehicles that are currently or have ever been registered in the twenty (20) salt belt States (CT, DE, IA, IL, IN, MA, MD, ME, MI, MN, MO, NH, NJ, NY, OH, PA, RI, VT, WI, and WV) plus D.C. **Production Dates:**

Model Year	Model	Production Dates	
		Start-of-Production	End-of-Production
2009	Forester	December 2007	March 2009
2010	Forester	February 2009	August 2010
2011	Forester	June 2010	August 2011
2012	Forester	June 2011	May 2012
2013	Forester	April 2012	January 2013

Model Year	Model	Number of Potentially Affected Vehicles
2005-2009	Legacy	92,250
2005-2009	Outback	184,856
2008-2011	Impreza	100,298
2008-2014	Impreza WRX/STI	41,371
2009-2013	Forester	241,463
	Total	660,238

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

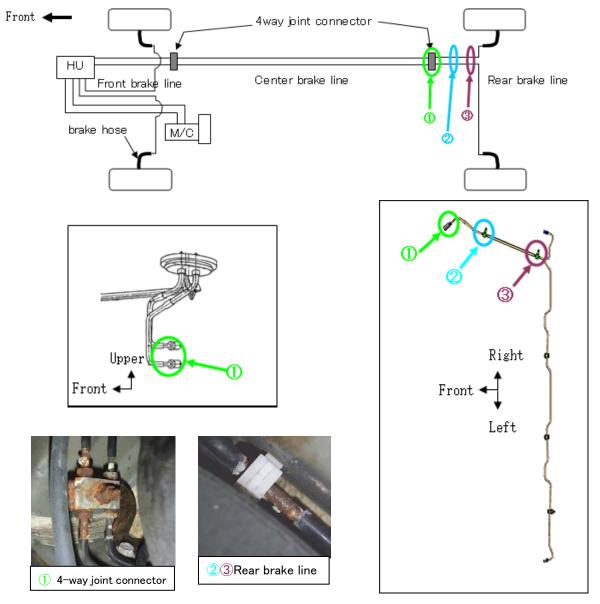
573.6(c)(4) - Percentage of Vehicles Estimated to Actually Contain the Defect

Although the percentage of vehicles within the affected "salt belt" States area likely to actually experience the failure is unknown, testing and either (1) treatment or (2) replacement and treatment will be performed on all of the affected vehicles.

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

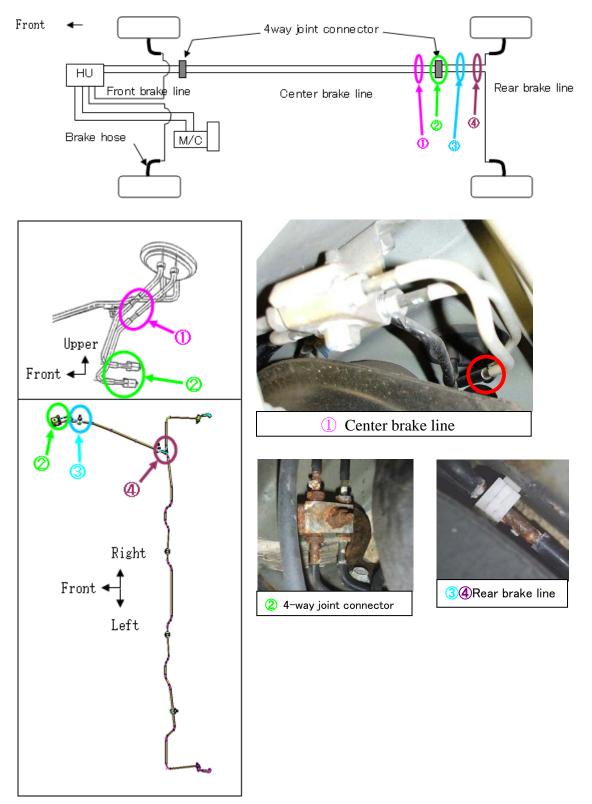
(1)-a Evaluation result of returned parts (Legacy and Outback)

Brake lines collected from twenty-one (21) 2005-2009MY Legacy and Outback vehicles sold in the North American market showed corrosion. Subaru's investigation determined that these vehicles brake lines could perforate after exposure to 7 or more winter seasons. The perforation could occur at the brake line four-way joint connector (1) and at two portions of rear brake line (2) and (3), where there are no resin covers installed.



(1)-b Evaluation result of returned parts (Impreza, Forester)

Brake lines collected from three (3) 2008-2011MY Impreza and 2009-2013 Forester vehicles sold in the North American market showed corrosion. Subaru's investigation determined that these vehicles brake lines could perforate after exposure to 7 or more winter seasons. The perforation could occur at the brake line four-way joint connector (2), a certain portion of center brake line (1) and two portions of rear brake line (3) and (4) where there are no resin covers installed.



(2) Cause of the Defect

Depending on driving conditions, salt water could splash on the brake lines through a gap in the fuel tank protector, resulting in excessive corrosion of the brake lines.

(3) Consequence

Brake fluid may leak from the perforated line(s). Since the center and rear brake lines work independently of one another, braking will still be possible if either (but not both) of the systems fail. The driver will be alerted to a fault in the brake system via illumination of the brake system warning telltale lamp because the fluid level will drop in the system. Failure of either the center or rear brake lines might cause the driver to misjudge the amount of brake pedal travel required to achieve the desired stopping distance.

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

<u>May 2011</u>: During rust investigations in 2011 in salt belt areas, it was found that the brake line corrosion had progressed beyond FHI's expectation on 2005-2009MY Legacy and Outback vehicles.

<u>August 2011-March 2012:</u> The brake lines were collected to more thoroughly evaluate the brake line corrosion progression.

<u>March 2012-March 2013</u>: FHI performed the following evaluation tests: (1) water exposure to the affected vehicles in real-world driving conditions and (2) salt water spray tests on static brake lines.

March 14, 2013: FHI organized further internal discussion of the brake line corrosion issue.

March 19, 2013: FHI finished the investigation; Subaru performed a safety recall (WQG-43) in the U.S. market.

<u>August 26, 2013</u>: FHI received information from Switzerland of brake fluid leakage at a rear brake line where there are no resin covers installed. This leak occurred during testing required as part of the procedure associated with Subaru's previous recall remedy program (WQG-43).

<u>August-November 2013</u>: FHI performed a rust investigation in the salt belt areas of the U.S. and Canada.

September-November 2013: FHI performed a rust investigation in the salt belt areas of Europe.

<u>January-February 2014:</u> Twelve (12) brake lines (Legacy/Outback - 9, Impreza/Forester - 3) were collected to more thoroughly evaluate brake line corrosion progression.

<u>January-March 2014</u>: FHI performed the following evaluation tests (1) water exposure to the affected vehicles in real-world driving conditions and (2) salt water spray tests on static brake lines for Legacy/Outback, Impreza/ and Forester.

May 19 2014: FHI organized further internal discussion of the brake line corrosion issue.

June 3 2014: FHI finished the investigation and concluded that Subaru will perform a safety recall in the U.S. market.

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

The remedy plan calls for dealers to inspect and determine if brake fluid seepage is present around the affected areas indicated in the previous diagrams. This is accomplished by depressing the brake pedal firmly during engine idle.

- Scenario No. 1: If <u>no</u> brake fluid seepage is observed, the affected areas will be rustproofed with anti-corrosion wax.
- Scenario No. 2: If brake fluid seepage is observed, the original center and rear brake lines will be replaced with new ones followed by rustproofing with anti-corrosion wax.

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 is: WQK-47.

577.5(a) - Submission of Owner Notification Letter

A copy of the owner notification letter will be submitted to NHTSA's Recall Management Division at least 5 days prior to mailing.