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By Recall Management Division at 2:54 pm, Dec 26, 2012

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(6 pages)



**Fuji Heavy Industries U.S.A., Inc.**  
c/o Subaru of America  
Subaru Plaza  
PO Box 6000  
Cherry Hill, NJ 08034-6000  
856-488-8500  
856-488-8669 fax

December 26, 2012  
Ref. No.: GR12-075

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 – Puddle Light Smoke on certain Subaru Legacy, Outback, Tribeca, and Forester vehicles**

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 Puddle Light on all 2010 and 2011MY Subaru Legacy and Outback vehicles, certain 2006MY through 2012MY Tribeca vehicles sold before January 2012, and certain 2009MY through 2012MY Forester vehicles sold before January 2012 in the United States. Our internal designation for this recall campaign will be: WQE-41.

If you have any questions on the enclosed report, please contact me at (443) 430-3619 or [jfro@subaru.com](mailto: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.

Enclosure

cc: Fuji Heavy Industries, Ltd. (Japan)

## 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 Potentially Containing the Defect**

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

Make:

- Subaru

Model Year(s), Model(s) and Production Dates:

- Certain 2006MY through 2012MY Tribeca vehicles sold before January 2012
- Certain 2009MY through 2012MY Forester vehicles sold before January 2012
- All 2010MY and 2011MY Legacy and Outback vehicles

Model Year	Model	Minimum VIN	Maximum VIN
2010	Legacy	A*210001	A*247983
		A*999001	A*999013
2010	Outback	A*310001	A*386571
		A*999500	A*999512
2011	Legacy	B*210001	B*265232
2011	Outback	B*310001	B*399998
		B*400001	B*448291
2006	Tribeca	64400005	64432170
2007	Tribeca	74400001	74412127
2008	Tribeca	84400001	84420236
2009	Tribeca	94400001	94408164
2010	Tribeca	A4400001	A4403157
2011	Tribeca	B4400001	B4403686
2012	Tribeca	C4400001	*
2009	Forester	9*700001	9*797855
2010	Forester	A*700001	A*799999
		A*800000	A*807110
		A*900001	A*918317
2011	Forester	B*700001	B*783898
2012	Forester	C*400002	*

\* There is no maximum VIN. Only vehicles sold before January 2012 are potentially affected.

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

A total of 53,999 accessory puddle lights were sold by SOA and may have been installed on the vehicles identified in the response to 573.6(c)(2)(i) shown on page no. 3. See below for the number of vehicles produced that could potentially have had one of the 53,999 accessory puddle lights installed.

Model Year	Model	Count
2010	Legacy	34,740
2010	Outback	71,268
2011	Legacy	50,911
2011	Outback	129,097
2006	Tribeca	30,041
2007	Tribeca	11,540
2008	Tribeca	18,850
2009	Tribeca	6,804
2010	Tribeca	2,415
2011	Tribeca	2,784
2012	Tribeca	*
2009	Forester	88,760
2010	Forester	111,830
2011	Forester	74,802
2012	Forester	*
<b>Total</b>		<b>**</b>

\*Final production volume cannot be determined. Only vehicles sold before January 2012 are potentially affected.

\*\* For 2012MY Tribeca and Forester, a final production volume cannot be determined since only vehicles sold before January 2012 are potentially affected.

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

Of the 53,999 accessory puddle lights sold, it is not possible to determine an estimated percentage of the affected vehicles that may actually experience this condition.

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

### Product Description:

There are four puddle lights on each vehicle. Two puddle lights are attached to each of the rocker panels of the vehicle. When illuminated, the puddle lights brighten the surrounding ground area underneath the doors of the vehicle.

(1) Customer claim

Customer claims smoke and/or fire coming out from puddle light.

(2) Cause of the defect

A short circuit can develop when either the puddle light or connector are exposed to an electrolytic moisture source (i.e. salt water) and it penetrates the circuit board of the puddle light or the pins of the puddle light connector(s).

(3) Failure mechanism

a) Puddle light failure mode.

Over time migration of electrolyte laden moisture into the circuit board and/or into the connector cavity, may result in a short circuit of the puddle light system. This may generate heat which may melt the plastic resulting in smoke or fire.

The puddle light short circuit does not draw sufficient enough current to cause the shared circuit 20 Amp fuse to open. The 20 Amp fuse is not used exclusively for the puddle light circuit.

b) Short circuit route

Path 1) in diagram 1 shows the short circuit on the circuit board internal to the Puddle Light Assembly.  
Path 2) in diagram 1 shows the short circuit in the harness connector cavity external to the Puddle Light Assembly.

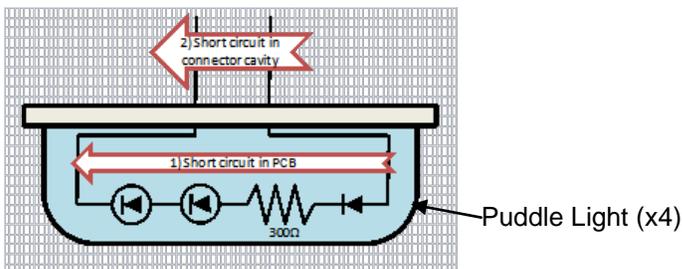


Diagram 1

(4) Consequence

Damage BIU (body integrated unit), damage/melting of rocker panel in vicinity of puddle light, damage/melting of puddle light which can catch fire in the worst case.

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

- First customer complaint/warranty claim related to smoke and/or fire (Tribeca puddle lamp) – 4/20/2007
- Approved engineering change to add dielectric grease to connectors – 9/6/2007
- Approved engineering change for puddle lamp wiring to tinned wire to reduce possibility of corrosion at the circuit board – 6/1/2008
- Approved engineering change for puddle lamp wiring from GXL coated to TEW to improve adhesion of epoxy to wires to help prevent water migration to the puddle lamp circuit board – 11/21/2008
- First customer complaint/warranty claim related to smoke or fire of Forester puddle lamp on 2/10/2009
- Approved engineering change (manufacturing running change) to add 250 mA fuse to puddle lamp harness for all puddle lamp – 1/12/2010
- First customer complaint/warranty claim related to smoke or fire of Outback/Legacy puddle lamp on 3/10/2010
- 3/8/2011 – Quality management report started official investigation to determine if the defect related to motor vehicle safety.
- December 20, 2012: FHI concluded its investigation and determined that this condition relates to motor vehicle safety; accordingly, SOA will conduct a recall campaign.

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

(i) The remedy plan calls for dealers to install an additional harness equipped with an inline fuse between the pre-arranged vehicle connector and the puddle light harness on both RH and LH sides of the vehicle. The inline fuse harness incorporates a 250mA fuse which protects the Puddle Light assembly from the effects of a short circuit.

(ii) Subaru of America, Inc. expects to notify U.S. dealers around December 26, 2012. Subaru will start preparing remedy parts. It is expected that owner notification will begin within 60 days. Subaru will update NHTSA if the situation changes significantly.

#### **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: WQE-41.

#### **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.