



**SUZUKI MOTOR OF AMERICA, INC.**

October 18, 2013

Ms. Nancy Lewis  
Associate Administrator for Enforcement  
National Highway Traffic Safety Administration  
Attn: Recall Management Division (NVS-215)  
1200 New Jersey Avenue, SE  
Washington, D.C. 20590

Dear Ms. Lewis:

The following information is submitted in accordance with the defect reporting regulations in Title 49 of the Code of Federal Regulations, Part 573.

1. Name of Manufacturer and Importers

Manufacturer: Suzuki Motor Corporation ("SMC")

Importers:

Continental U.S. – Suzuki Motor of America, Inc. ("SMAI")  
Hawaii – Montgomery Motors, Ltd.  
Puerto Rico – Suzuki Del Caribe, Inc.

2. Identification of Motor Vehicles Involved

Affected vehicles are all 2004-2013 Suzuki GSX-R600, 2004-2013 Suzuki GSX-R750, and 2005-2013 Suzuki GSX-R1000 motorcycles. Refer to Attachment 1 for details.

The reported defect involves the front brake master cylinder. The name and address of the front brake master cylinder supplier is:

Nissin Kogyo Co., Ltd.  
840 Kokubu, Ueda-City, Nagano Pref., Japan  
Telephone: 81-268-24-3111

3. Total Number of Motor Vehicles Involved

210,228

4. Percentage of Motor Vehicles Estimated to Contain the Defect

Unknown

5. Description of Defect

After a long-term service life of the motorcycle without changing the brake fluid, the brake fluid can deteriorate and absorb moisture. The brake piston inside the front brake master cylinder of some motorcycles may not have uniform surface treatment. This combination of conditions can lead to corrosion of the brake piston. Corrosion of the brake piston generates gas, which may not be adequately purged from the master cylinder due to the side position location of the reservoir port. Gas remaining in the master cylinder can affect braking power by reducing proper fluid pressure transmission to the front brake. Over time, as gas continues to slowly accumulate above the reservoir port, the front brake lever may develop a “spongy” feel and stopping distances may be extended, increasing the risk of a crash.

Attachment 2 contains illustrations of the front brake system and the original and countermeasure front brake master cylinders.

6. Chronology of Principal Events

May 2009	SMC received a report from its German distributor of a customer claim that after long-term parking, the brake lever feeling became poor. SMC examined the collected parts but did not find any defect and was unable to reproduce the problem. SMC judged that the problem was likely due to insufficient purging of air when maintenance was performed.
December 2011	SMC received a report from American Suzuki Motor Corporation of a customer claim that after more than two weeks of being parked, the front brake lever feeling became poor. SMC examined the collected parts and did not find any defect. SMC confirmed that insufficient air purge caused an increase in front brake lever stroke, and surmised that this occurred when maintenance was performed.  SMC received two Field Technical Information Reports (FTIRs) from the U.S. market which may be related to the reported defect (“possibly-related FTIRs”).
June 2012	SMC received one possibly-related FTIR from the U.S. market.

<p>August – October 2012</p>	<p>SMC received three possibly-related FTIRs from the U.S. market. SMC examined a collected motorcycle and found gas in the front brake master cylinder. SMC could not determine a cause for the presence of the gas.</p>
<p>December 2012</p>	<p>An SMC engineer visited the U.S. to examine an affected motorcycle. Again, gas was found in the front brake master cylinder.</p>
<p>December 2012 – January 2013</p>	<p>SMC collected an affected motorcycle from its distributor in Portugal. SMC determined that the gas that was present in the front brake master cylinder was hydrogen. SMC began an investigation to determine the cause of hydrogen gas generation. SMC received six possibly-related FTIRs from the U.S. market.</p>
<p>February – March 2013</p>	<p>SMC determined that old brake fluid which had absorbed moisture in combination with high temperature conditions had caused corrosion of the brake piston in the front brake master cylinder, resulting in generation of hydrogen gas. SMC continued its investigation to better understand the amount of hydrogen gas generation and the effect on brake performance. SMC received nine possibly-related FTIRs from the U.S. market.</p>
<p>April – June 2013</p>	<p>SMC received five possibly-related FTIRs from the U.S. market.</p>
<p>August – September 2013</p>	<p>SMC collected brake parts from a number of motorcycles used for display, test drives, long-term unsold units, etc. that had never had brake system maintenance. SMC found corrosion of the front brake piston and deterioration of brake fluid (acidification and additive decrement). SMC determined that the corrosion was due to insufficient surface treatment of the front brake piston. No defects were found in rear brake parts and there was no significant deterioration of brake fluid. SMC received one possibly-related FTIR from the U.S. market.</p>
<p>October 11, 2013</p>	<p>SMC decided to conduct a safety recall to address this issue.</p>

For subject motorcycles sold in the U.S., there have been no reports of injuries due to the reported defect.

7. Description of Corrective Action

Suzuki distributors will conduct a safety-related recall campaign to replace the front brake master cylinder on affected motorcycles with a redesigned part that has the reservoir port at the top location of the master cylinder to allow better purging of gas, and has improved surface treatment for the brake piston. Several associated parts will also be replaced. SMAI currently anticipates that it will notify dealers about the details of the recall during the week of October 28, 2013, and will notify owners about the recall during the week of November 4, 2013. We expect that the Suzuki distributors in Hawaii and Puerto Rico will follow a similar schedule.

Enclosed is a copy of SMAI's plan for reimbursing owners and purchasers who incurred costs for remedies of the reported defect in advance of recall notification.

8. Copy of Notices

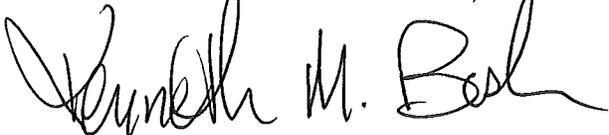
Enclosed are a copy of the initial notification letter that SMAI received from SMC and a copy of the stop sale notice that SMAI issued to its dealers. Copies of additional notices will be provided when they have been finalized.

9. SMAI Campaign Numbers

2A31	2004 –2005 GSX-R600, 2004-2005 GSX-R750
2A32	2006 –2007 GSX-R600, 2006-2007 GSX-R750
2A33	2005-2006 GSX-R1000
2A34	2007-2008 GSX-R1000
2A35	2008-2010 GSX-R600, 2008-2010 GSX-R750
2A36	2011-2013 GSX-R600, 2011-2013 GSX-R750, 2009-2013 GSX-R1000

Sincerely,

SUZUKI MOTOR OF AMERICA, INC.



Kenneth M. Bush  
Department Manager, Government Relations

ATTACHMENT 1

IDENTIFICATION OF MOTORCYCLES INVOLVED BY MAKE, MODEL, MODEL YEAR, INCLUSIVE MONTH/YEAR OF MANUFACTURE, AND VEHICLE IDENTIFICATION NUMBER RANGE

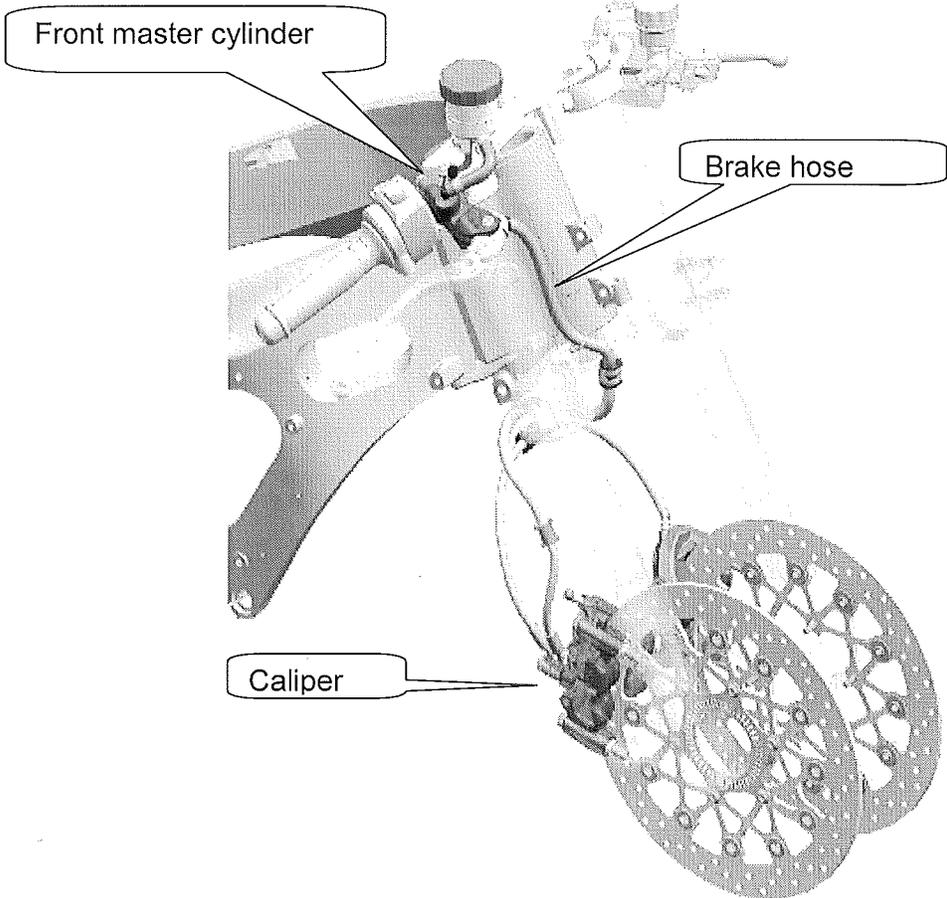
SUZUKI MODEL	MODEL YEAR	INCLUSIVE MONTH/YEAR OF MANUFACTURE	VIN Range	TOTAL NO. OF VEHICLES
GSX-R600	2004	12/03 – 07/04	JS1GN7CA*42100031 - JS1GN7CA*42112647	14919
	2005	08/04 – 11/05	JS1GN7CA*52100008 - JS1GN7CA*52116274	15730
	2006	12/05 – 07/06	JS1GN7DA*62100030 – JS1GN7DA*62120262	19133
	2007	07/06 – 10/07	JS1GN7DA*72100006 – JS1GN7DA*72127285	25514
	2008	01/08 – 06/08	JS1GN7EA*82100035 – JS1GN7EA*82113364	12015
	2009	07/08 – 08/09	JS1GN7EA*92100001 – JS1GN7EA*92106198	5089
	2010	11/09 – 07/10	JS1GN7EA*A2100007 – JS1GN7EA*A2100486	33
	2011	11/10 – 07/11	JS1GN7FA*B2100018 – JS1GN7FA*B2103394	3029
	2012	11/11 – 07/12	JS1GN7FA*C2100014 – JS1GN7FA*C2101618	1227
	2013	09/12 – 03/13	JS1GN7FA*D2100004 – JS1GN7FA*D2102818	2804
GSX-R750	2004	01/04 – 07/04	JS1GR7JA*42100014 – JS1GR7JA*42106439	5872
	2005	09/04 – 11/05	JS1GR7JA*52100007 - JS1GR7JA*52108872	8266
	2006	01/06 – 06/06	JS1GR7KA*62100018 - JS1GR7KA*62111085	9959
	2007	07/06 – 10/07	JS1GR7KA*72100006 - JS1GR7KA*72114464	13768
	2008	02/08 – 06/08	JS1GR7LA*82100020 - JS1GR7LA*82106617	5411

ATTACHMENT 1

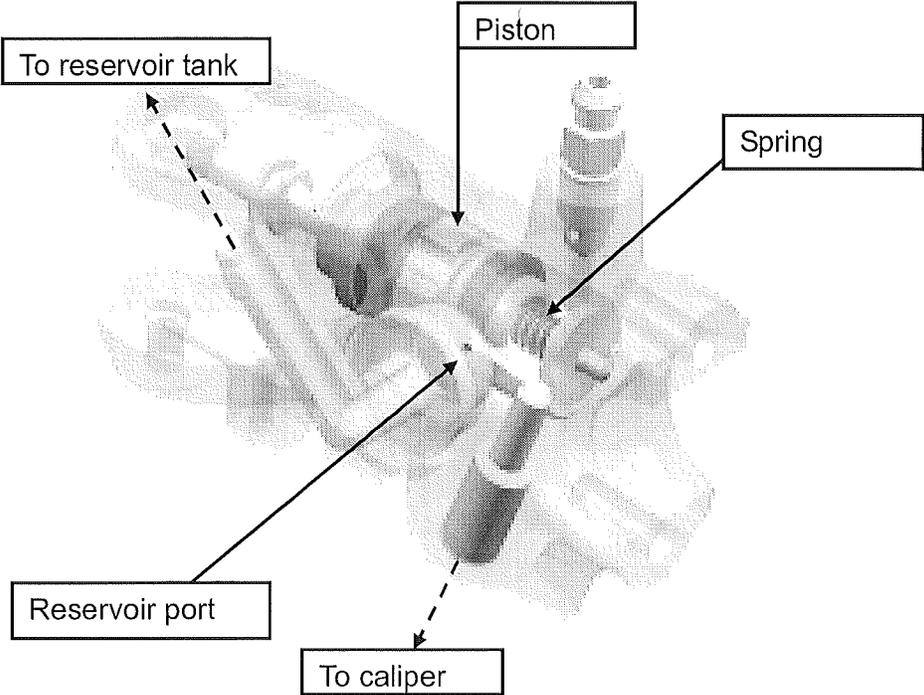
SUZUKI MODEL	MODEL YEAR	INCLUSIVE MONTH/YEAR OF MANUFACTURE	VIN Range	TOTAL NO. OF VEHICLES
GSX-R750	2009	07/08 – 08/09	JS1GR7LA*92100001 - JS1GR7LA*92104412	3550
	2010	11/09 – 08/10	JS1GR7LA*A2100005 - JS1GR7LA*A2100308	22
	2011	12/10 – 08/11	JS1GR7MA*B2100009 - JS1GR7MA*B2104818	4556
	2012	10/11 – 07/12	JS1GR7MA*C2100001 - JS1GR7MA*C2102374	2122
	2013	09/12 – 06/13	JS1GR7MA*D2100003 - JS1GR7MA*D2103460	2046
GSX-R1000	2005	12/04 – 06/05	JS1GT76A*52100019 - JS1GT76A*52110201	9484
	2006	07/05 – 10/06	JS1GT76A*62100003 - JS1GT76A*62117349	16575
	2007	12/06 – 06/07	JS1GT77A*72100028 - JS1GT77A*72115379	13391
	2008	07/07 – 10/08	JS1GT77A*82100004 - JS1GT77A*82108577	7069
	2009	02/09 – 05/09	JS1GT78A*92100028 - JS1GT78A*92103389	2602
	2010	08/09 – 05/10	JS1GT78A*A2100001 - JS1GT78A*A2100524	39
	2011	09/10 – 04/11	JS1GT78A*B2100002 - JS1GT78A*B2102477	2328
	2012	11/11 – 06/12	JS1GT78A*C2100024 - JS1GT78A*C2102121	1752
	2013	09/12 – 05/13	JS1GT78A*D2100005 - JS1GT78A*D2103087	1923

ATTACHMENT 2

Front Brake System



Front Brake Master Cylinder



## ATTACHMENT 2

### Countermeasure

#### Before

The reservoir port is located at the side position of the master cylinder. Gases are not purged sufficiently.

#### After

The reservoir port is located at the top position of the master cylinder to allow better purging of gases.

