# TOYOTA MOTOR NORTH AMERICA, INC. 

February 9, 2010

Mr. Daniel C. Smith<br>Associate Administrator for Enforcement<br>National Highway Traffic Safety Administration<br>1200 New Jersey Avenue, SE<br>Washington, DC 20590

## Re: 2010 MY Toyota Prius and Lexus HS250h ABS ECU Programming Part 573, Defect Information Report

Dear Mr. Smith:

In accordance with the requirements of the National Traffic and Motor Vehicle Safety Act of 1966 and 49 CFR Part 573, on behalf of Toyota Motor Corporation ["TMC"], we hereby submit the attached Defect Information Report concerning a voluntary safety recall of certain Toyota Prius and Lexus HS250h vehicles to address an issue with the programming of the ABS ECU.

Should you have any questions about this report, please contact me at (202) 775-1707.

Sincerely,
TOYOTA MOTOR NORTH AMERICA, INC.


Chris Santucci
Manager
Technical \& Regulatory Affairs

## DEFECT INFORMATION REPORT

1. Vehicle Manufacturer Name:

Toyota Motor Corporation ["TMC"]
1, Toyota-cho, Toyota-city, Aichi-ken, 471-8571, Japan

## Affiliated U.S. Sales Company

Toyota Motor Sales, USA, Inc. ["TMS"]
19001 South Western Avenue, Torrance, California 90509

## Component Containing Defect

ABS Electronic Control Unit
Toyota Motor Corporation Hirose Plant
543, Kirigadou, Nishihirose-cho, Toyota, Aichi, 470-0309, Japan
2. Identification of Affected Vehicles:

Based on production records, we have determined the possible affected vehicle population as in the table below.

| Make/ <br> Car Line | Model Year | Manufacturer |  | VIN | Production Period |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | VDS | VIS |  |
| Toyota Prius | 2010 | TMC | KN36U | A5000001-A5000074 | $\begin{array}{r} 2009 / 4 / 20- \\ 2010 / 1 / 27 \end{array}$ |
|  |  |  | KN3DU | A0001044-A0124257 |  |
|  |  |  |  | A1000088-A1157301 |  |
|  |  |  |  | A5000002-A5118198 |  |
| $\begin{aligned} & \text { Lexus } \\ & \text { HS250H } \end{aligned}$ | 2010 | TMC | BB1BA | A2000101-A2028744 | $\begin{array}{r} 2009 / 1 / 29- \\ 2010 / 2 / 8 \end{array}$ |

Note: Although the involved vehicles are within the above VIN ranges, not all vehicles within these ranges were sold in the U.S.
3. Total Number of Vehicles Potentially Affected:

2010 MY Prius: $\quad 133,459$
2010 MY HS250H: $\quad 15,090$
Total: 148,549
4. Percentage of Vehicles Estimated to Actually Experience Malfunction:

Unknown
5. Description of Problem:

Although the ABS (Antilock Brake System) is operating as designed, customers are perceiving inconsistent brake feel after ABS actuation during slow and steady application of the brakes on rough or slick road surfaces, and stopping distances may be increased compared with the customers' expectation for a given pedal force.

## 6. Chronology of Principal Events:

## August 2009

Toyota received a field technical report from the Japan market concerning the brake performance of a Toyota Prius. Toyota investigated the vehicle and a recovered part, however it was not confirmed that there was any abnormality.

October 2009 - January 2010
Toyota received another field technical report from the U.S. market on a Prius which indicated issues with the VSC/brake performance. Duplication testing confirmed that the braking force after ABS actuation was reduced compared with the braking force before ABS actuation, when the brakes were applied on bumpy surfaces. After a detailed investigation, Toyota determined that the ABS system's software programming was permitting this change in braking force. Although this system was operating as intended, Toyota made a running production change in January 2010 to improve the ABS system's response time.

## February 2010

After further investigation, Toyota learned that many drivers have experienced the phenomenon, particularly in the winter, where it was confirmed that drivers may maintain a fixed brake pedal stroke in winter driving. Under this condition, vehicle stopping distance may increase, relative to the customers' expectations for a given pedal force. Therefore, Toyota decided to conduct a voluntary safety recall of all vehicles with the subject ABS ECUs within the affected range. The same action will also be conducted in Japan, Canada, Australia, Europe and other countries.

## 7. Description of Corrective Repair Action:

All known owners of the subject vehicles will be notified by first class mail to return their vehicles to a Toyota or a Lexus dealer for a rewrite of the programming of the ABS control unit.

## Reimbursement Plan for pre-notification remedies for Toyota

As the owner notification letters will be mailed out well within the active period of the Toyota or the Lexus New Vehicle Limited Warranty ("Warranty"), all involved vehicle owners for this recall would have been provided a repair at no cost under the Toyota's Warranty or the Lexus's Warranty.
8. Recall Schedule:

Toyota's mailing of the owner notifications will commence in late February and be completed in late March 2010.

Copies of the owner notification and dealer instructions will be submitted as soon as they are available.
9. Distributor/Dealer Notification Schedule:

Toyota's notifications to distributors/dealers will be sent in the middle of February 2010.

