

Toyota Motor Sales, U.S.A., Inc. 19001 South Western Avenue, S207 Torrance, CA 90509-2991

TMS-NTC-13222 September 11, 2013

Recall Management Division National Highway Traffic Safety Administration 1200 New Jersey Avenue, SE Washington, DC 20590

Re: Toyota Safety Recall 13V-396 Preliminary Dealer Notification

To whom it may concern,

Please find attached the <u>Preliminary</u> Dealer Notification Letter for Toyota Safety Recall 13V-396 on the following Toyota and Lexus vehicles:

- Certain 2006 through 2010 Model Year Highlander HV
- Certain 2006 to 2008 Model Year RX 400h

If you have any questions regarding this matter, please contact me at (310) 468-5316.

Sincerely,

Mrt J.K.

Quality Compliance Assistant Manager

Attachments:

- Lexus 13V-396 (DLF) Dealer Notification (Prelim)
- Toyota 13V-396 (D0M) Dealer Notification (Prelim)

Mark Kubota / TMS Toyota Customer Services Product Quality and Service Support, Quality Compliance September 4, 2013 Approved By: Bob Waltz

To:All Toyota DealersFrom:Product Support Division

Safety Recall D0M (D1M) Preliminary Notification

Certain 2006 through 2010 Model Year Highlander HV Vehicles Intelligent Power Module (IPM) Replacement

On September 4, 2013, Toyota will file a Defect Information Report (DIR) with the National Highway Traffic Safety Administration (NHTSA) informing the agency of our intent to conduct a voluntary Safety Recall on certain 2006 through 2010 model year Highlander HV vehicles.

Toyota is currently working on obtaining the necessary replacement parts. We will notify dealerships and owners again when the replacement parts are available.

Condition

Within the vehicle, inside the inverter assembly is an Intelligent Power Module (IPM) which contains a control board equipped with transistors. Due to variation in characteristics of transistors in parallel circuits, the temperature of the transistor(s) may exceed the allowable temperature of the solder underneath the transistor. If this occurs, the solder could degrade and eventually cause heat damage to the transistor(s), illuminating various warning lights on the instrument panel. In most cases, the vehicle will enter a fail-safe mode, resulting in reduced motive power in which the vehicle can still be driven for short distances. In limited instances, the fuse of the power supply circuit could blow, causing the hybrid system to shut down and resulting in the vehicle stopping while being driven.

Covered Vehicles

There are approximately 79,600 Toyota Highlander HV vehicles covered by this Safety Recall in the U.S.

Model Name	Model Year	Production Period	Number of Vehicles
Toyota	Certain 2006 through 2010	Mid February 2005	Approximately
Highlander HV		through late July 2010	79,600 units

<u>Status</u>

- D0M ("D1M" until the remedy is launched) Preliminary Notification documents will be posted on TIS starting the morning of Wednesday, September 4, 2013. *For reference purposes only*, VINs covered by this Safety Recall will be searchable on TIS starting Wednesday morning, September 4, 2013.
- Toyota is currently preparing the remedy parts for this condition.

Media Contacts

It is imperative that all media contacts (local and national) receive a consistent message. In this regard, all media contacts must be directed to Cindy Knight (310) 468-2170 in Toyota Corporate Communications. (Please do not provide this number to customers. Please provide this contact to only media associates.)

Customer Handling

A FAQ is attached to help dealerships respond to any customer concerns. If the customer has any further questions, they are requested to contact the Toyota Customer Experience Center. The Toyota Customer Experience Center can be reached at 1-888-270-9371 Monday through Friday, 5:00 am to 6:00 pm, or Saturday 7:00 am through 4:00 pm Pacific Time.

Please note the attached FAQ is published on the www.Toyota.com website for customer viewing.

Pre-Owned Vehicles in Dealer Inventory

Toyota generally requests that dealers do not deliver any pre-owned vehicles in dealer inventory that are covered by a Safety Recall until the vehicle has been remedied. However, in this case, unless prohibited by your state's law, dealers can deliver un-remedied pre-owned vehicles if they disclose to the customer that the vehicle is subject to a Safety Recall and Toyota will send them a notification when the remedy is available

Handling of Vehicles Exhibiting this Condition

In the unlikely event a customer contacts a dealership and <u>has experienced</u> the condition described, dealerships are requested to assist him/her by setting up an appointment to diagnose the condition. If the condition is related to the Safety Recall, the diagnosis and repair will be performed at **no charge**.

Campaign Designation Decoder



Dealership associates that have any questions are requested to contact their District Service/Parts Manager.

Please review this preliminary notification with your staff to assure that all relevant personnel have been briefed regarding this subject.

Thank you for your cooperation.

ΤΟΥΟΤΑ

Safety Recall D0M - (D1M) Preliminary Notice Certain 2006 through 2010 Model Year Highlander HV Vehicles Intelligent Power Module (IPM) Replacement - Q&A

Customer Frequently Asked Questions

Published Early August, 2013

Background

On September 4, 2013, Toyota will file a Defect Information Report (DIR) with the National Highway Traffic Safety Administration (NHTSA) informing the agency of our intent to conduct a voluntary Safety Recall on certain 2006 through 2010 model year Highlander HV vehicles.

Toyota is currently working on obtaining the necessary replacement parts. We will notify dealerships and owners again when the replacement parts are available.

Q1: What is the condition?

A1: Within the vehicle, inside the inverter assembly is an Intelligent Power Module (IPM) which contains a control board equipped with transistors. Due to variation in characteristics of transistors in parallel circuits, the temperature of the transistor(s) may exceed the allowable temperature of the solder underneath the transistor. If this occurs, the solder could degrade and eventually cause heat damage to the transistor(s), illuminating various warning lights on the instrument panel. In most cases, the vehicle will enter a fail-safe mode, resulting in reduced motive power in which the vehicle can still be driven for short distances. In limited instances, the fuse of the power supply circuit could blow, causing the hybrid system to shut down and resulting in the vehicle stopping while being driven.

Q1a: What is the Hybrid System Inverter?

A1a: The hybrid system inverter converts high-voltage DC, stored in the HV battery, into AC for the motor generator. It also converts AC into DC during regenerative braking for storage in the HV battery.

<u>Q2:</u> Which Warning Lamps are illuminated on the instrument panel when the vehicle enters fail-safe driving mode?

A2: All of the following warning lights and messages will be illuminated on the instrument panel when the vehicle enters the fail-safe driving mode. The fail-safe driving mode will result in reduced motive power in which the vehicle can still be driven for short distances.

Warning lights				
	Master Warning Light			
	Slip Indicator			
۱ <u>۲</u> ۲	Check Engine Warning			
CHECK	Light			
	Electronically Controlled			
	Brake System Warning			
(yellow	Light			
indicator)				

	Warning messages
CHECK	Malfunction of VSC function is
VSC SYSTEM	detected.
CHECK	Hybrid system malfunction is
HYBRID SYSTEM	detected.
CHECK	All Wheel Drive system
AWD SYSTEM	malfunction is detected.

<u>Q2a:</u> How long and what distance can a vehicle be driven when the vehicle enters fail-safe driving <u>mode?</u>

A2a: The distance a vehicle will continue to travel in fail-safe driving mode will vary based upon the hybrid battery state of charge and the road conditions. If a vehicle enters fail-safe driving mode, the driver should pull-over and stop the car in a safe area. The driver should immediately contact his/her local Toyota dealer for assistance.

Q3: What is Toyota going to do?

A3: **Toyota is currently working on obtaining the necessary replacement parts.** Once the replacement parts are available, we will notify owners.

Once the replacement parts have been produced in sufficient quantities, Toyota will send (consistent with parts availability and repair capacity) an owner notification by first class mail advising owners to make an appointment with his/her authorized Toyota dealer to have the Intelligent Power Module inspected and if necessary replaced at **no charge**.

Q3a: When does Toyota anticipate the owner notification (remedy) to begin?

A3a: Toyota anticipates it will take several months to prepare parts in sufficient quantities.

Q3b: What if this condition occurs before the replacement parts are available?

A3b: If this condition occurs before the replacement parts are available, the owner should contact an authorized Toyota dealership for diagnosis and an appropriate repair as soon as possible. If the problem is related to the identified condition, the repair will be performed at no charge.

Q4: What steps can owners take to reduce the possibility of this condition from occurring prior to the availability of the remedy?

A4: Owners may take the following steps to reduce the possibility of this condition from occurring until the remedy is completed.



Q4a: Will this condition occur if the Power Meter shows usage above 100kW?

A4a: Situations where the Power Meter shows output slightly over 100kW for a brief moment should not raise any concerns. Drivers should refrain from driving conditions where power output exceeds 100kW continuously and/or substantially. Drivers may do so by refraining from towing with the vehicle until the remedy is completed.

Q5: Which and how many vehicles are covered?

A5: There are approximately 79,600 Toyota Highlander HV and approximately 53,500 Lexus RX 400h vehicles covered by this Safety Recall in the U.S.

Model Name	Model Year	Production Period	Number of Vehicles
Toyota	Certain 2006 through 2010	Mid February 2005	Approximately
Highlander HV	Certain 2006 through 2010	through late July 2010	79,600 units
Lexus RX 400h	Certain 2006 through 2008	0,	Approximately 53,500 units
		December 2008	55,500 dints

Q5a: Are there any other Toyota or Lexus models covered by this Safety Recall?

A5a: No. There are no other Toyota or Lexus models covered by this Safety Recall.

<u>Q6:</u> What if my vehicle was covered by the previous Safety Recall (B0J) for 2006 and 2007 Model Year <u>Highlander Hybrid (HV) Vehicles Hybrid System Inverter, Intelligent Power Module?</u>

A6: If you have still not had Safety Recall B0J performed, please contact any authorized Toyota dealer to schedule an appointment to have the remedy performed as soon as possible.

Q7: What if I have additional questions or concerns?

A7: If you have additional questions or concerns, please contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 5:00 am to 6:00 pm, or Saturday 7:00 am through 4:00 pm Pacific Time.



Sept. 3, 2013

Fast Facts is an update on Toyota and industry news. Please feel free to share this information with family and friends. For more news, visit <u>www.toyotanewsroom.com</u>.

Toyota Recalls Highlander and Lexus RX Hybrids for Transistors; Lexus IS and GS for Loose Bolts

Toyota Motor Sales, U.S.A. today announced that it will conduct two voluntary safety recalls. One involves approximately 133,000 MY 2006-2010 Highlander Hybrid and MY 2006-2008 Lexus RX 400h vehicles. The other involves approximately 102,000 MY 2006-2011 Lexus IS 350, IS 350C, and GS 350 vehicles.

In the involved Toyota Highlander Hybrid and Lexus RX 400h vehicles, transistors within the hybrid system's inverter assembly can experience heat damage due to variations in characteristics of the transistors' parallel circuits. Should this occur, various warning lights on the instrument panel will illuminate, and in most cases the vehicle will enter "limp home mode." In limited instances, the hybrid system will shut down and resulting in the vehicle stopping while the vehicle is being driven.

In the involved Lexus IS 350, IS 350C and GS 350 vehicles, bolts used to secure the variable valve timing control device can become loose, causing the vehicle to stop while being driven. Early warning for this condition can be an abnormal noise just after start-up.

Owners of vehicles subject to these recalls will receive a notification by first class mail.

Detailed information is available to customers at <u>www.toyota.com/recall</u> and <u>www.lexus.com/recall</u> and by calling the Toyota Customer Experience Center at 1-800-331-4331.