Tyson Siekiera / TMS Toyota Customer Services Product Quality and Service Support, Quality Compliance July 14, 2015 Approved By: Tom Trisdale

To: All Toyota Dealers From: Product Support Division

Safety Recall F0R (F1R) - *Preliminary Notification* Certain 2012 – 2014 Model Year Prius V Software Update for Motor Generator ECU and Power Management ECU

On July 15, 2015, 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 2012 – 2014 Model Year Prius V vehicles.

This preliminary information is being provided to keep you informed of the filing. <u>Toyota is currently preparing the</u> <u>remedy for this condition</u>. We will notify dealerships again at the time of the next phase, prior to the owner notification starting.

Condition

Inside the Hybrid Inverter Assembly is an Intelligent Power Module (IPM) which contains a control board equipped with transistors. In certain Model Year 2012-2014 Prius V vehicles, the current software settings for the motor generator ECU and power management ECU could result in higher thermal stress in certain transistors, potentially causing them to become damaged. If this happens, various warning lights will illuminate and the vehicle can enter a failsafe mode. In rare circumstances, the hybrid system might shut down while the vehicle is being driven, resulting in the loss of power and the vehicle coming to a stop, increasing the risk of a crash.

When the remedy becomes available, Toyota will update the motor generator ECU and power management ECU software in the involved vehicles.

Covered Vehicles

There are approximately 108,600 certain 2012-2014 model year Prius V vehicles covered by this Safety Recall.

Model Name	Model Year	Production Period
Prius V	2012 – 2014	Late August, 2011 – Late June, 2014

<u>Status</u>

- F0R (F1R until the remedy is launched) Preliminary Notification documents will be available on TIS Tuesday evening, July 14, 2015. *For reference purposes only*, VINs covered by this Safety Recall will be searchable on TIS starting Tuesday evening, July 14, 2015.
- Toyota is currently preparing the remedy for this condition and expects to announce the remedy in late July 2015.

Pre-Owned Vehicles in Dealer Inventory

Toyota requests that dealers do not deliver any pre-owned vehicles in dealer inventory that are covered by a Safety Recall unless the defect has been remedied.

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**.

Media Contacts

If you are a dealership associate and have any questions, please contact your District Service/Parts Manager. *In the event you are contacted by the News media*, 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.)

Customer Contacts

A FAQ is available on TIS to help respond to customer concerns. If a 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 to 4:00 pm Pacific Time.

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

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

Thank you for your cooperation. TOYOTA MOTOR SALES, U.S.A., INC.

ΤΟΥΟΤΑ

Safety Recall F0R (F1R) – *Preliminary Notification* Certain 2012 - 2014 Model Year Prius V Vehicles Software Update for Motor Generator ECU and Power Management ECU

Customer Frequently Asked Questions Published July 14, 2015

Q1: What is the condition?

A1: Inside the Hybrid Inverter Assembly is an Intelligent Power Module (IPM) which contains a control board equipped with transistors. In certain Model Year 2012-2014 Prius V vehicles, the current software settings for the motor generator ECU and power management ECU could result in higher thermal stress in certain transistors, potentially causing them to become damaged. If this happens, various warning lights will illuminate and the vehicle can enter a failsafe mode. In rare circumstances, the hybrid system might shut down while the vehicle is being driven, resulting in the loss of power and the vehicle coming to a stop, increasing the risk of a crash.

When the remedy becomes available, Toyota will update the motor generator ECU and power management ECU software in the involved vehicles.

Q1a: What is the Hybrid System Inverter?

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

<u>Q1b:</u> What is the motor generator ECU and Power Management ECU?

A1b: The motor generator ECU (MG ECU) and the Power Management ECU, together, control the operations of the vehicle's hybrid systems.

Q2: What is Toyota going to do?

A2: In late July, 2015 Toyota will begin sending owner notifications by first class mail to owners of vehicles covered by this Safety Recall. Any authorized Toyota dealer will perform a software update to the MG ECU and Power Management ECU at **No Charge** to you. Additionally, if the vehicle has the condition present, the IPM will also be replaced and **No Charge** to you. Please see your local authorized Toyota dealer for additional details.

<u>Q3:</u> <u>Which Warning Lamps are illuminated on the instrument panel when the vehicle enters fail-safe driving</u> <u>mode?</u>

A3: All of the following warning lights will be illuminated on the instrument panel when the vehicle enters the failsafe driving mode. The fail-safe driving mode will result in reduced power under which the vehicle can still be driven for short distances.

Warning Lights		Warning Lights		
	Hybrid System Warning	(Yellow Light)	Electronically Controlled Brake System Warning Light	
	Slip Indicator	PCS	Pre-Collision System Warning Light (If equipped)	
CHECK	Check Engine Warning Light			

Q3a: How long and what distance can a vehicle be driven when the vehicle enters fail-safe driving mode?

A3a: 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.

What steps can I take to reduce the possibility of this condition from occurring until the remedy is Q4: performed?

A4: Until the remedy is performed, drivers should avoid placing a high load on the hybrid system by avoiding full throttle application when possible. As indicated in your owner's manual, Toyota does not recommend towing with your Prius V, and we urge you to follow this recommendation to avoid placing a high load on the hybrid system.

What if I experience the condition described above? Q4a:

A4a: If you experience the condition described above, please contact your local authorized Toyota dealer for diagnosis and repair. If the condition is related to this Safety Recall, the repair will be performed at No Charge to you.

Which and how many vehicles are covered by this campaign? <u>Q5:</u>

A5: There are approximately 108,600 certain 2012-2014 model year Prius V vehicles covered by this Safety Recall.

Model	Model Year	Production Period
Prius V	2012-2014	Late August, 2011 – Late June, 2014

Are there any other Lexus/Toyota/Scion vehicles covered by this campaign in the U.S.? Q5a:

A5a: No, there are no other Lexus/Toyota/Scion vehicles covered by this Safety Recall.

Q5b: Why are other hybrid vehicles not covered by this campaign?

A5b: Toyota has determined that other hybrid vehicles aren't affected because the programming of the ECUs of other vehicles is different.

<u>Q6:</u> How long will the repair take?

A6: The software updates will take approximately 1 hour; however, depending upon the dealers work schedule, it may be necessary to make the vehicle available for a longer period of time.

<u>Q7:</u> A7: What if I previously paid for repairs related to this campaign?

Reimbursement consideration instructions will be provided in the remedy owner letter.

Q8: How does Toyota obtain my mailing information?

A8: Toyota uses an industry provider who works with each state's Department of Motor Vehicles (DMV) to receive registration or title information, based upon the DMV records. Please make sure your registration or title information is correct.

What if I have addition questions or concerns? <u>Q9:</u>

A9: If you have additional guestions or concern, please contact the Toyota Customer Experience Center at 1-888-270-9371 Monday – Friday, 5:00 am to 6:00 pm, or Saturday 7:00 am to 4:00 pm Pacific Time.