OMB Control No.: 2127-0004

Part 573 Safety Recall Report

15V-449

Manufacturer Name: Toyota Motor Engineering & Manufacturing

Submission Date: JUL 15, 2015 NHTSA Recall No.: 15V-449 Manufacturer Recall No.: NR



Manufacturer Information:

Manufacturer Name: Toyota Motor Engineering & Manufact

Address: 19001 South Western Avenue

Torrance CA 90501 Company phone: 1-800-331-4331

Population:

Number of potentially involved: 108,624 Estimated percentage with defect: 0

Vehicle Information:

Vehicle: 2012-2014 Toyota Prius V

Vehicle Type : **Body Style:**

Power Train: NR

Descriptive Information: (1) Although the involved vehicles are within the above VIN range, not all vehicles

in this range were sold in the U.S.

(2) No other Toyota or Lexus vehicles use the same inverter assembly and software used to control the boost converter in the motor/generator control electronic

control unit (ECU) as the involved vehicles.

Production Dates: AUG 22, 2011 - JUN 30, 2014

VIN (Vehicle Identification Number) Range

Begin: NR End: NR ☐ Not sequential VINs

Description of Defect:

Description of the Defect: The inverter assembly is part of the hybrid system of the subject vehicle. Inside the inverter assembly is an Intelligent Power Module (IPM) which contains a control board equipped with transistors known as Insulated-Gate Bipolar Transistors (IGBT's). In a specific usage condition the software that controls the boost converter in the IPM could cause microscopic voids to build up in the solder beneath the IGBTs used for the operation of the boost converter. If this occurs, the heat dissipation ability of the IGBT could be reduced, causing the IGBT to be damaged. If the IGBT is damaged, it could result in the illumination of various warning lights on the instrument panel. In most cases, the vehicle will enter a failsafe mode, resulting in reduced motive power in which the vehicle can still be driven safely for certain distances. In limited instances, the motor/generator ECU could reset, causing the hybrid system to shut down and resulting in the vehicle stopping while being driven, increasing the risk of a crash.

FMVSS 1:NR FMVSS 2:NR

Description of the Safety Risk: In most cases, the vehicle will enter a fail-safe mode, resulting in reduced

motive power in which the vehicle can still be driven safely for certain distances. In limited instances, the motor/generator ECU could reset, causing the hybrid system to shut down and resulting in the vehicle stopping while

being driven, increasing the risk of a crash.

Description of the Cause: NR

Identification of Any Warning that can Occur: NR

Supplier Identification:

Component Manufacturer

Name: Toyota Motor Corporation--Hirose Plant

Address: NR

FOREIGN STATES

Country: Japan

Chronology:

Please see the attached Part 573 Defect Information Report for the full chronology

Description of Remedy:

Description of Remedy Program: All known owners of the subject vehicles will be notified by first class mail to

return their vehicles to a Toyota dealer to have the software updated for both the motor/generator control ECU and the hybrid control ECU. If an owner experiences a failure of the boost converter IGBT before the vehicle receives updated software, the dealer will repair the inverter or replace the inverter assembly with a new one at no charge. The owner letter will instruct vehicle owners who have paid to have this condition remedied prior to this campaign to seek reimbursement pursuant to Toyota's General

Reimbursement Plan.

How Remedy Component Differs from Recalled Component : NR

Identify How/When Recall Condition was Corrected in Production: NR

Recall Schedule:

Description of Recall Schedule: Notifications to owners will begin late July 2015. A copy of the draft owner

notification letter(s) will be submitted as soon as it is available. Notifications to

distributors/dealers will be sent on July 14, 2015. Copies of dealer

communications will be submitted as they are issued.

Planned Dealer Notification Date: NR - NR

Planned Owner Notification Date: NR - NR

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* NR - Not Reported			
	The information contained in thi	is report was submitted pursuant to 49 CFR §5	73