

Wayne Hutchinson / TMS Toyota Customer Services  
Product Quality and Service Support, Quality Compliance  
March 11, 2015  
Approved By: Bob Waltz

To: All Toyota Dealers  
From: Product Support Division

**Safety Recall F0I (F1I) - Preliminary Notice**  
**2012-2014 Model Year RAV4 Electric Vehicle (EV)**  
**EV Traction Motor Assembly**

**On March 11, 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 RAV4 Electric Vehicles.**

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

**Condition**

In the involved RAV4 EV's, components in the Electric Vehicle Traction Motor Assembly, which is part of the propulsion system, may cause the vehicle to shift to "neutral" due to a software issue. This condition will also trigger a "Check EV System" warning message on the instrument panel and turn on a malfunction indicator lamp. If the vehicle shifts to "neutral", this will result in a complete loss of drive power, which can increase the risk of a crash.

**Covered Vehicles**

There are approximately 2,500 vehicles covered by this Safety Recall in the US.

Model	Model Year	Production Period	Approx. UIO
RAV4 EV	2012-2014	July 2012 through August 2014	2,500

**Status**

- F0I ("F1I" until the remedy is launched) Preliminary Notification documents will be available on TIS Tuesday evening, March 10, 2015.
- ***For reference purposes only***, VINs covered by this Safety Recall will be searchable on TIS starting Tuesday evening, March 10, 2015.
- ***Toyota is currently preparing the remedy for this condition.***

**New Vehicles in Dealership Inventory**



Under Title 49, Section 30112(a) of the United States Code, a dealer cannot sell, offer for sale, or introduce or deliver for introduction in interstate commerce a new motor vehicle when it is aware that the vehicle does not comply with an applicable Federal Motor Vehicle Safety Standard. In addition, 49 Code of Federal Regulations §577.13 requires us to provide the following advisory: It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

Vehicle Safety Recall completion should always be verified through TIS. We request your assistance to ensure involved vehicles are identified and not delivered prior to performing the remedy.

*(Dealer Stock list attached for your reference)*

**Inspection Reminder Mirror Hang Tags for Covered Vehicles**

To easily recognize vehicles involved in this Safety Recall, each dealership should utilize Inspection Reminder Hang Tags. Please reference the VIN list provided to identify new vehicles in dealer inventory involved in this Safety Recall. Inside the vehicle's glove box are stickers containing the VIN. Apply one of these stickers to the hang tag and install the hang tag in the vehicle. A sample copy of the Inspection Reminder Hang Tag has been included for your reference.



Note: Dealerships can order Hang Tags from the Material Distribution Center (MDC).

Part Number	Description	Qty.
00411-140003	Inspection Mirror Hang Tag	(25 Per Pack)

**Pre-Owned Vehicles in Dealer Inventory**

Toyota generally requests that dealers not deliver any pre-owned vehicles in their inventory which are involved in a Safety Recall until the defect has been remedied. However, in this case, until the remedy is available dealers can deliver pre-owned vehicles if they disclose to the customer that the vehicle is subject to a Safety Recall and Toyota or the dealers will send/forward them a notification when the remedy is available.

Also, as a reminder, Toyota Certified Used Vehicle (TCUV) policy prohibits the certification of any vehicle with an outstanding Special Service Campaign or Safety Recall. Thus, no affected units should be sold or delivered as a TCUV until the Safety Recall has been completed on that vehicle.

**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**

If you are contacted by a customer who has questions or concerns, 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 review this preliminary notification with your staff to assure that all relevant personnel have been briefed regarding this subject.

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

Thank you for your cooperation.

**Dealer Stock List**

Dealer Code	VIN
04308	2T3YL4DV5EW003387
04308	2T3YL4DV4EW003400
04308	2T3YL4DV6EW003477
04308	2T3YL4DV8EW003514
04389	2T3YL4DV6EW003351
09107	2T3YL4DV1EW003063



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## Customer Frequently Asked Questions

Published mid-March, 2015

We at Toyota care greatly about your safety while we prepare the remedy for this condition. We are providing the following information to keep you informed of the recall details. Please check back frequently as this document will be updated.

**Q1: What is the condition?**

A1: In the involved RAV4 EV's, components in the Electric Vehicle Traction Motor Assembly, which is part of the propulsion system, may cause the vehicle to shift to "neutral" due to a software issue. This condition will also trigger a "Check EV System" warning message on the instrument panel and turn on a malfunction indicator lamp. If the vehicle shifts to "neutral", this will result in a complete loss of drive power, which can increase the risk of a crash.

**Q1a: What is the Electric Vehicle (EV) Traction Motor Assembly?**

A1a: The Electric Vehicle (EV) Traction Motor Assembly is part of the propulsion system, which contains a drive inverter, electric motor, shift control actuator, speed sensor, and transaxle assembly. The assembly as a whole receives input signals from various sources (such as the accelerator pedal) to determine the necessary speed and power of the vehicle. The EV Traction Motor Assembly then uses energy from the battery to provide power at the drive wheels. The EV Traction Motor Assembly also acts as a generator to produce high-voltage electricity to recharge the EV battery assembly. This is done when the vehicle is in motion and the driver depresses the brake pedal or releases the accelerator pedal.

**Q2: What is the cause of this condition?**

A2: The speed sensor detects the electric motor speed and rotational position, and sends this information as a signal to the drive inverter ECU. Due to a software issue, the drive inverter ECU may not be able to determine the rotational position of the motor, which causes a speed sensor error code, causing the vehicle to shift to "neutral".

**Q3: Are there any warnings or indicators before this condition occurs?**

A3: There are no advanced warnings prior to the existence of this condition. However, if the condition is present, one or more of the following could occur:

- Display of the "Check EV System" warning message
- Illumination of the Malfunction Indicator Light (MIL)
- Loss of drive power

**Q4: What if I experience the condition before the remedy is available?**

A4: If you experience the condition or warnings described above, please stop the vehicle in a safe manner and 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.

***In regards to the Malfunction Indicator Light (MIL) please note:*** During normal operating conditions the MIL is designed to come on when the engine switch is turned to the "ON" position during the ignition cycle check function, and then it goes off after a few seconds. The MIL turning off after the check period means the system is operating as designed. If the MIL illuminates or remains illuminated after the few second check period, please contact your local authorized Toyota dealer for diagnosis and appropriate

repair. If the MIL illumination is related to the condition covered by this Safety Recall, the repair will be performed at **no charge** to you.

**Q4a: Can my vehicle be driven if this condition occurs?**

A4a: Due to the possibility of a loss of drive power, Toyota does not recommend the vehicle be driven if this condition occurs.

**Q5: What is Toyota going to do?**

A5: **Toyota is currently preparing the remedy for this condition.** Once preparations are complete, Toyota will send an owner notification letter by first class mail to owners of vehicles covered by this Safety Recall.

Additional details on the remedy will be provided in future communications.

**Q5a: When does Toyota anticipate the remedy will be available?**

A5a: Toyota is currently working on the remedy for this Safety Recall. Toyota will provide additional information as it becomes available.

**Q5b: How does Toyota obtain my mailing information?**

A5b: 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.

**Q5c: When the remedy becomes available, do I need my owner letter to have the remedy performed?**

A5c: You do not need an owner letter to have this recall completed; however, to assist the dealer in confirming vehicle eligibility, we request that you present this notice at the time of your service appointment.

**Q6: Which and how many vehicles are covered by this Safety Recall?**

A6: There are approximately 2,500 vehicles covered by this Safety Recall in the U.S.

Model	Model Year	Production Period	Approx. UIO
RAV4 EV	2012-2014	July 2012 through August 2014	2,500

**Q6a: Are there any other Toyota, Lexus or Scion vehicles covered by this Safety Recall in the U.S.?**

A6a: No, there are no other Toyota, Lexus, or Scion vehicles covered by this Safety Recall.

**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.