

November 3, 2015

DEFECT INFORMATION REPORT

1. Vehicle Manufacturer Name:

Toyota Motor Manufacturing, Kentucky, Inc. ["TMMK"]
1001 Cherry Blossom Way, Georgetown, KY, 40324

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

Affiliated U.S. Sales Company

Toyota Motor Sales, USA, Inc. ["TMS"]
19001 South Western Avenue, Torrance, CA 90501

Manufacturer of the Pre-Collision System

DENSO CORPORATION
1-1, Showa-cho, Kariya-city, Aichi-pref., 448-8661, Japan
Telephone: + 81-566-25-5511

Country of Origin: Japan

2. Identification of Involved Vehicles:

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

Make/Car Line	Model Year	Manufacturer	Production Period
Toyota / Avalon, Avalon HYBRID	2013 – 2015	TMMK	10/19/2012 – 10/27/2015
Lexus/ ES350, ES300h	2013 – 2015	TMC	6/18/2012 – 7/6/2015

Note: (1) Although the involved vehicles are within the above Production Period range, not all vehicles in this range were sold in the U.S.

(2) Only vehicles equipped with the optional Pre-Collision System (PCS) are involved.

(3) Other Toyota and Lexus vehicles equipped with PCS do not have the same drive and handling characteristics, vehicle body dimensional characteristics, or an identifiable defect trend as the recalled vehicles. Newer generation PCS are of a different design. Therefore, these other Toyota and Lexus vehicles are not included in this recall.

3. Total Number of Vehicles Potentially Involved:

Avalon : 14,591
Avalon HYBRID : 10,134
ES350 : 3,573
ES300h : 2,514
TOTAL : 30,812

4. Percentage of Vehicles Estimated to Actually Contain the Defect:

Unknown

5. Description of Problem:

Some subject vehicles are equipped with a Pre-Collision System (PCS) as optional equipment. The PCS can automatically engage the service brakes to lessen the severity of an impact when the radar sensor detects the possibility of a frontal collision with an object, such as another vehicle. However, in certain situations, there is a possibility that the system could interpret a steel joint or plate in the roadway as an object, depending on the vehicle's orientation relative to the road surface while in motion. If this occurs, the PCS warning buzzer sounds and the system may apply the service brake automatically.

Unexpected braking when no impending collision object is present during normal operation of the vehicle could increase the risk of a crash.

6. Chronology of Principal Events:

October 2013 - January 2015:

Toyota received some field reports from the U.S. and Canadian markets indicating the PCS activated without an impending collision condition present. Some events could be duplicated at the scene with specific road conditions, such as the presence of a metal bridge gap in the roadway, which is described in the owner's manual as a condition where the PCS may be triggered without an impending collision. Because no problem with the PCS components and no trouble codes were found during the inspection of the vehicles, Toyota continued monitoring the field information.

February 2015:

Toyota received a report of an accident on a 2014 MY Lexus ES 300h indicating that the PCS allegedly activated with no vehicle ahead of it. During the event the customer applied the parking brake and the vehicle spun around, ending up on the side of the road. Toyota investigated the vehicle. No collision events were recorded in the EDR. Toyota tried to recreate the PCS activation, but the vehicle evaluation was not able to duplicate the incident.

March - October 2015:

Toyota sporadically received field reports from the U.S. and Canadian markets indicating that the PCS activated without an impending collision condition present. In addition, in September 2015, Toyota received a second accident report on a 2014 MY Toyota Avalon alleging that the brakes applied on their own, resulting in the vehicle being struck from behind by another vehicle. Toyota investigated the incident and reviewed the EDR data retrieved from the vehicle. The data confirmed that the PCS may have activated the braking function before the collision and the driver applied the brake pedal just after the activation of the PCS. A vehicle evaluation was performed at the accident location. Toyota confirmed that the PCS activation at this location was triggered due to the identification of a metal bridge gap as an impending collision with another vehicle.

On October 6 and October 22, Toyota discussed its PCS investigation with NHTSA.

Based on the duplication tests at the incident locations and an identifiable trend of incidents on Avalon and ES vehicles, Toyota concluded that, in certain situations, there is

a possibility that the system could interpret a steel joint or plate in the roadway as an object, depending on the vehicle's orientation relative to the road surface while in motion. If this occurs, the PCS warning buzzer sounds and the system may apply the service brake automatically. Unexpected braking when no impending collision object is present during normal operation of the vehicle could increase the risk of a crash.

October 28, 2015

Based on the results of the above investigation, Toyota decided to conduct a voluntary safety recall campaign.

As of October 28, 2015, Toyota is aware of 14 Toyota field reports and 2 warranty claims that have been received from the U.S. that relate or may relate to this condition.

Multiple counts of the same incident are counted separately.

7. Description of Corrective Repair Action:

Interim Remedy:

All known owners of the subject vehicles will be notified by first class mail to return their vehicles to a Toyota or Lexus dealer. The dealers will disable the PCS at no cost.

Permanent Remedy:

When the permanent remedy becomes available, a second mailing will be conducted, notifying owners and requesting them to return to the dealership. Toyota or Lexus dealers will replace PCS components with improved ones at no cost.

Reimbursement Plan for pre-notification remedies:

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.

8. Recall Schedule:

Notifications to owners of Toyota/ Lexus models will occur by mid of November, 2015.

A copy of the draft owner notification letter(s) will be submitted as soon as available.

9. Distributor/Dealer Notification Schedule:
Notifications to distributors/dealers were sent on November 3, 2015. Copies of dealer communications will be submitted as they are issued.

10. Manufacturer's Campaign Number:
Toyota's Campaign Number: F0V (Interim: F1V)
Lexus's Campaign Number: FLE (Interim: F2E)