

Toyota Motor Engineering & Manufacturing North America, Inc.

Vehicle Safety & Compliance Liaison Office 19001 South Western Avenue Torrance, CA 90501

February 17, 2015

# **DEFECT INFORMATION REPORT**

# 1. <u>Vehicle Manufacturer Name</u>:

Toyota Motor Manufacturing France S.A.S ["TMMF"] Parc d'Activités de la Vallée de l'Escaut-sud BP16 59264 Onnaing FRANCE

# Affiliated U.S. Sales Company

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

# Manufacturer of the Rear Axle Assembly

**TMMF** 

Telephone: +33(0)3-2751-2121

Country of Origin: France

## 2. <u>Identification of Involved Vehicles</u>:

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

Make/	Model	Manufac-		VIN	Production
Car Line	Year	turer	VDS	VIS	Period
Toyota/ Yaris	2015	TMMF	*TUD3	FA020343 - FA034436	September 8, 2014 through January 9, 2015

- Note: (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 affected rear axle hub bearing assembly as the subject vehicles.

## 3. Total Number of Vehicles Potentially Involved:

226

## 4. <u>Percentage of Vehicles Estimated to Actually Contain the Defect:</u>

Unknown

## 5. Description of Problem:

The rear axle hub bearing assemblies of the subject vehicle are assembled to the rear axle beam assembly using four rear axle bearing bolts. There is a possibility that one or more rear axle bearing bolts on some vehicles could have been tightened insufficiently during the manufacturing process at the particular facility at which the vehicles were assembled. In this condition, the bolt(s) could become loose during vehicle operation and could eventually detach. The detached bolt(s) could damage rear brake components during rotation, resulting in a reduction of brake performance or a potential wheel lock up, which could increase the risk of a crash.

#### 6. Chronology of Principal Events:

## Early January 2015 – Early February 2015

Toyota received a report from a dealership in the U.S. indicating the brake pedal went to the floor and the right rear wheel did not move due to damaged brake components inside the rear drum brake assembly. The damage appeared to be caused by a rear axle bearing bolt detaching from the rear axle hub bearing assembly in the rear drum brake assembly. A subsequent inspection of this vehicle by Toyota in mid-January found no evidence of full tightening on the surface of the axle bearing assembly for one of the bolts.

After receiving the initial information, TMMF reviewed the in-line repair history of this vehicle and also any production process change history. It was confirmed that a tightening error occurred in one of the four bolts of this vehicle during the final tightening process. In addition, it was found that the error-proofing logic for the tightening tool (nut runner) had been changed in September 2014. In this logic, if a tightening error occurs, such as an improper tightening condition, the nut runner ceases operation, and a supervisor must correct the improperly tightened bolt and tighten the remaining bolt(s) to complete the repair process. (Before this change, if a tightening error occurred in any bolt, the operator could finish tightening the remaining bolt(s) and then a supervisor would repair and tighten only the improperly tightened bolt to complete the repair process.) As a result, a process change was made to assure that there is a further bolt torque confirmation whenever a tightening error occurs.

Other vehicles in the TMMF yard which experienced a tightening error on any hub bearing bolt were inspected. One of 58 vehicles was found with a low torque condition on three of the four bolts and with a record of a tightening error occurrence on one of the bolts.

## February 11, 2015

Based on the result of the above investigation, Toyota decided to conduct a voluntary safety recall campaign to inspect the rear axle hub bearing bolts and, if necessary, retighten the bolt. If a bolt has detached, the rear axle hub bearing assembly and rear brake components will be replaced.

As of February 9, 2015, two Toyota field reports and one warranty claim have been received on one unique VIN related to this condition.

## 7. Description of Corrective Repair Action:

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 rear axle hub bearing bolts inspected. If a bolt is found to be loose, the dealer will retighten with the specified tightening torque. If a bolt is detached, the dealer will replace the rear axle hub bearing assembly and rear brake components with new ones.

#### Reimbursement Plan for pre-notification remedies

As the owner notification letters will be mailed out well within the active period of the Toyota New Vehicle Limited Warranty ("Warranty"), all involved vehicle owners for this recall would have been provided a repair at no cost under Toyota's Warranty.

# 8. <u>Recall Schedule</u>:

Toyota anticipates the owner notification will begin in mid-March 2015. Copies of the owner notification letter will be submitted as soon as it is available.

# 9. <u>Distributor/Dealer Notification Schedule</u>:

Toyota's notification to distributors/dealers will be sent on February 17, 2015. Copies of the dealer communications will be submitted as they are issued.