

(8 pages)

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OUTSIDE SKF**

**SKF****RECEIVED***By Recall Mangement Division at 7:53 am, Jul 24, 2014*

Sent via facsimile transmission (7 pages in total):  
202-366-1767

July 23, 2014

National Highway Traffic Safety Administration  
400 Seventh Street, SW  
Washington, DC 20590

Attention: Associate Administrator for Enforcement

RE: Notice Pursuant to 49 CFR Sec. 573.5

SKF USA Inc. ("SKF") has determined that a defect which relates to motor vehicle safety exists in an item of motor vehicle equipment for aftermarket service use that is manufactured by SKF at its Elgin, Illinois and by its SKF affiliate in Guadalajara, Mexico plants. The item of equipment that is of concern is an oil seal used in wheel ends that is more particularly described below.

As of the date of this notice, to SKF's knowledge no injuries or fatalities have occurred as a consequence of the defect.

I. Description of Vehicle Equipment Containing the Defect

The item of vehicle equipment that contains the safety related defect is identified by SKF as its part numbers 28554 and 28555 (the "Seal"). The applications for the Seal are

- (1) 1999-2013 2WD Chevrolet and GMC ½ ton, ¾ ton, 1 ton full size vans with full floating rear end, with a 10.5" & 11.5" ring gear;
- (2) 1999-2013 2WD Chevrolet and GMC ½ ton, ¾ ton, 1 ton pickup trucks with full floating rear end, 10.5" & 11.5" ring gear; and
- (3) 1999-2013 2WD Chevrolet and GMC ½ ton, ¾ ton, 1 ton SUV with full floating rear end, 10.5" & 11.5" ring gear.

II. Description of Defect

The defect in the wheel seal consists of the inside diameter of the seal being manufactured larger than what is proper to ensure sufficient interference between the sealing inside diameter and the shaft onto which the seal is installed. This defect may cause the gear oil to leak, which could contaminate the brake friction material. If contaminated, the proper functioning of the brake friction material can be compromised.

**SKF USA Inc.**

**Automotive Division - North American Vehicle Service Market**  
890 N. State Street, Elgin IL 60123, USA, Phone +1 847-742-0700

In extreme cases, the differential could lose too much gear oil, which could lead to premature bearing failure. The defect resulted from an error in a specification for the inside diameter of the Seal. The specification indicated in the drawing was too great. The shaft dimension specified in the drawing was 72.49 mm when it should have been 72.24 mm. This results in the Seal having less than the required press fit against the shaft.

As of the date of this notice, SKF has not received any reports of an accident attributed to SKF's defective Seal.

### III. Identity of Recall Population

For the affected SKF part numbers, SKF had been purchasing the Seal from a third party for resale by SKF into the vehicle service market. After a decision to insource the manufacture of the seal within SKF, the Seal was manufactured by SKF at its Elgin, Illinois and by its SKF affiliate in Guadalajara, Mexico. The product drawing for the design of the Seal for SKF's manufacture of the Seal was found to contain the wrong inside diameter dimension for the Seal's intended applications. Thus the suspect population of the Seal is limited to those parts manufactured by SKF and excludes parts that it had been purchasing from its vendors.

Initially, the parts made by SKF were sold under the same part number as the parts purchased by SKF from its third party vendors. A total 3,364 pieces of the suspect Seal were produced by SKF at its own manufacturing plants were sold as part number 28554. However, over the relevant time period when the suspect Seal was being produced at SKF's own plants, a total of 46,199 Seals were sold by SKF. Of this total sold, 6,930 pieces are roughly estimated by SKF to exist on the warehouse and store shelves of its distributors.

A total of 36,310 pieces of the suspect Seal were sold by SKF as part number 28555, of which 14,877 pieces are roughly estimated by SKF to exist on the warehouse and store shelves of its distributors.

SKF anticipates that all pieces of part number 28555 will be recalled. However, SKF is still reviewing whether it is practicable to identify the suspect Seal within the total population of parts sold as part number 28554 which largely consists of parts not affected by the defect. As noted below, SKF will incorporate the results of its method of indemnifying the suspect Seal in the drafts of the written recall communications that will be included in its subsequent supplemental notice to be provided to the agency.

### IV. Chronology

The following is a chronology of events leading to SKF's determination of the safety related defect in the Seal:

June 26, 2014: SKF takes note of repeated complaints for the same product and application which complaints are communicated to SKF as phone calls for technical assistance, emailed complaints made to sales, claims for labor on servicing of wheel ends (by July 1, 2014 approximately 15 inquiries in all were received by SKF related to the Seal and its application). SKF takes steps to isolate and quarantine the suspect population of the Seal.

June 27, 2014. SKF purchased a used axle assembly to investigate the complaints. Measurements were made by SKF with a coordinate measuring machine to check shaft dimensions, which leads to the discovery that the shaft dimension of the axle where the Seal is to be seated is different from the part engineering print used by SKF to manufacture the seal.

July 3, 2014: A meeting is held to inform responsible management of SKF of the possibility that a safety related defect may be present in the Seal. A decision is made to continue with containment action plans, and to continue the investigation into the extent of the suspect population of Seals that may contain the defect, and to make inquiries to the vehicle OEM and a brake manufacturer regarding the impact that the defect may have on vehicle safety.

July 8, 2014: A meeting is held to review results of containment actions with responsible SKF management and discuss the ability to identify the suspect population of Seals.

July 15, 2014: A meeting is convened to inform responsible management of SKF of the results of the investigation and inquiries made by SKF North American Vehicle Service Market Business Unit staff to a brake manufacture and to the OEM. The responses received confirm SKF's concerns regarding the likelihood of premature seal failures. Instructions are given to draft notices to customers and a notice to NHTSA as specified by federal regulations.

July 18, 2014: SKF's legal department staff confirms the findings and the recommendations of the SKF North American Vehicle Service Market Business Unit staff regarding the potential for the Seal defect adversely affecting vehicle safety and confirms the necessity to conduct a recall of the affected Seal.

#### V. Remedy

SKF proposes to replace, at its expense, all the Seals in the suspect population of parts manufactured at its Elgin, Illinois and Guadalajara, Mexico plants. SKF expects to have 21,000 pieces of correctly finished Seals in stock on or about September 1, 2014 which can be used to support the recall. The full specifics of the program to affect a remedy are yet to be determined by SKF.

VI. Recall Schedule

The date for implementation of the recall campaign has not been finally determined by SKF.

VII. Recall Communications

SKF intends to supplement this notice with another notice to be provided to NHTSA as soon as possible to provide the agency with necessary information concerning its plan to remedy the defect and the recall schedule, and to provide the agency with drafts of SKF's intended notices to be provided to its distributors for distribution to end-users and to publicize the recall campaign. The drafts will include the results of SKF's determination on the method of identifying the suspect Seal. No notice or other written communication regarding the recall program will be issued by SKF without its first having obtained a recall number from NHTSA.

Kindly contact the undersigned for further information if needed.

Sincerely yours,

SKF USA Inc.



Richard W. Frett  
Associate General Counsel

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