Date 4-3-2015

Keith Fisher
Director of Corporate Compliance
NHTSA/TRANSPORT CANADA
423 N. Main Street
Middlebury, IN 46540

RE: Response to Formal Information Request – "Wheel Lug Failures

Document Control # 51-03272015-0023

Mr. Fisher,

This communication shall serve as Lippert Components, Inc. written response to your request dated March 27, 2015 regarding the above referenced matter.

1.) Subject Component Manufacturing date, start, and end

- Part Number-122093 12 X 2 Brake Hub
- Stud 121803
- Suspect Lot # 45L27174,
- Qty. received 1260 hubs 7,560 studs
- Cast Julian Date SZ141223 to SZ141228
- Installed on Limited number of LCI Axles with Date of Manufacture March 12, 2015 through March 26, 2015.

2.) Describe the defect or non-compliance in detail

Broken wheel stud at in-process torque station not representative of improper torque process but rather a suspect process condition due to the location of the failure on the wheel bolt. The stud breakage was under the serrations located on the top of the threads.

3.) Describe the Safety Risk

To date all failures have occurred at in-process torque or at PDI torque process station at the OEM. There have been no field failures. To date, there have been 11 total known wheel bolts break of this nature at two OEM's. As a precautionary measure we opted to locate the production date runs and contain to ensure we do not have any problems while awaiting test results.

4.) Describe the Cause in Detail

Cause as of yet is unknown. Samples were received of the broken wheel bolts from customer and sent to Exova Lab. We are awaiting formal results to follow as additional samples were sent to lab. Initial suspicion is embrittlement due to "Tempered Martensitic Embrittlement".

5.) Identify any warning which can precede or occur

No warning until final torque is placed on nut.

6.) Provide the Chronology of events leading up to the defect decision or test data for the noncompliance decision

March 25, 2015 - Customer contacted Bruce Bailey, LCI axle engineer, with a broken stud on three consecutive units on their line. All three occurrences were on the rear door side of the unit. Pictures were sent to Bruce Bailey. The location of breakage was different than we would typically see on a cross thread or lug nut issue and all three were on a TRP supplied hub and drum. The decision at that time was to place all product built using the SZ141223 thru SZ141228 Julian date on TRP hubs on hold as a precautionary measure while waiting further testing.

7.) Describe the defect/noncompliance remedy component, including the manufacturer's plan for reimbursement

Lippert Components will replace the hub from another supplier that has no known issues.

8.) Describe what distinguishes the remedy component from the original component

a. Empirical test data required on replacement components.

Placed all TRP supplier 6 lug hub and drums on hold within the Lippert facility until testing could be completed. If shipment was needed the product was replaced with a different supplier. This issue has not been located in any other supplier's product or past production runs. Testing is under way in our R & D facility. A fixture was designed to try to repeat the breakage within a controlled environment. Testing is ongoing.

9.) Identify and describe how and when the condition was corrected in production

All hub and drums from TRP were placed on hold.

10.) Looking at the population of 5200# axle hub/wheel studs, provide a list of all peer products sold to FR that fit within the current investigation scope.

See 12

11.) Different plant part numbers do not release LCI by plant; hub/wheel stud configuration remains the same.

See 12

12.) Provide a complete list of all 5200# axles supplied to FR in the time frame (reported 3/13/15) stated in the email (attached)

a.) Attached list of the shipments on axles shipped to Forest River during appropriate time frame

b.) 122093 – 6 lug hub and drum. See attachment

c.) No warranty data available. Failure has occurred at OEM

13.)

TBD

Respectfully yours,

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