U.S. Department of Transportation

National Highway Traffic Safety Administration

ODI RESUME

OFFICE OF DEFECTS INVESTIGATION

NHTSA

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Investigation: EQ 12-003
Prompted by: 11E-057
Date Opened: 03/07/2012 **Date Closed:** 08/15/2013
Investigator: Alexander Ansley
Approver: Jennifer Timian
Subject: Dexter Hydraulic Brake Actuators Failing

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: DEXTER AXLE
Products: Brake actuators shipped 9/1/2011 - 12/19/2011
Population: 1,713

Problem Description: Certain Dexter Axle brake actuator pumps may be prone to premature wear and experience failure.

ACTION / SUMMARY INFORMATION

Action: Close EQ

Summary:

Please see the closing resume attached with this PDF copy of this document.

Closing Resume for EQ12-003 – Dexter/Carlisle Brake Actuators

On December 20, 2011, Dexter Axle Company (Dexter) notified the NHTSA that it had decided a defect exists in certain electric/hydraulic (e/h) brake actuator pumps sold for use on various trailers. Some of these pumps may have not been properly heat treated. This condition can cause premature wear of some critical components in these pumps which can render the unit inoperable. The e/h brake actuator provides braking power to the trailer brakes. Failure of the actuator can result in the loss of braking effort by the trailer, increasing the risk of a crash. This issue was assigned recall number 11E-057.

We also received a similar report from another brake actuator manufacturer. Specifically, in a letter dated January 31, 2012, Carlisle Brake & Friction Company (Carlisle) notified the NHTSA of the same defect it determined to exist in certain HydraStar XL trailer brake actuators it manufactured October 5, 2011, through December 9, 2011. Carlisle specified that the piston pumps installed into its brake actuators did not receive the proper heat treatment operation and, as a result, are subject to wear at a higher than normal rate. This issue was assigned recall number 12E-003.

On April 9, 2012, RMD mailed an IR letter to Parker Hannifin Corp., Oildyne Division (Parker Oildyne), the manufacturer of the piston pumps both Dexter and Carlisle identified as failing within their recalled brake actuators. RMD requested a purchaser list for any company that purchased the same or similar defective piston pumps from Parker Oildyne. On April 9, 2012, Parker Oildyne submitted its written response to NHTSA.

On May 9, 2012, RMD mailed IR letters to five (5) companies Parker Oildyne identified as purchasing the defective piston pumps. Four (4) companies wrote to RMD explaining that the piston pumps they received were not used in motor vehicle applications. One (1) company, Titan Distribution, Inc. (Titan), responded that its piston pumps were installed into brake actuators for trailer applications. However, Titan's piston pumps are configured to the motor differently than the pumps used by Dexter and Carlisle, and also run at a much slower RPM. Titan explained that any failure would be experienced over time and "there would be a gradual decrease in PSI well before catastrophic failure. An end user would notice this condition well before failure." As such, Titan decided not to issue a safety recall for their products.

Between the dates of March 14, 2012, and April 18, 2013, RMD mailed IR letters to ninety-nine (99) companies identified by Dexter, Carlisle, and their distributors. Forty-five (45) companies replied with various explanations such as: their affected actuators were returned to the manufacturer before installation; they did not receive any of the units actually recalled; or they were not a vehicle manufacturer that would be required to conduct a safety recall.

Six (6) letters were undeliverable. Ten (10) companies did not submit written responses to RMD's IR letter, even after multiple contact attempts were made by RMD staff. A list of these companies will be submitted to NHTSA's Office of the Chief Counsel for further possible enforcement action.

Thirty-eight (38) manufacturers filed Part 573 Reports and conducted safety recalls for their affected vehicles. Those recalls are listed below:

Count	Manufacturer Name	Recall #
1	4 Star Trailer, Inc.	12V-116
2	Alumina, Inc.	12V-381
3	Aluminum Trailer	12V-171
4	Anderson Mfg	12V-204
5	Belmont Machine	12V-240
6	Big Tex Trailer Mfg. Inc.	12V-168
7	Bloomer Trailer Manufacturing, Inc.	12V-182
8	Butler Trailer Manufacturing	12V-237
9	Cam Superline, Inc.	12V-220
10	Circle W Trailer Mfg	12V-180
11	Custom Built Trailers	12V-167
12	Delta Manufacturing	12V-276
13	Elite Trailer MFG LLC	13V-209
14	Elite Trailers, Inc.	12V-246
15	Falcon Trailers	12V-162
16	Featherlite Inc.	12V-113
17	Interstate Trailer Mfg.	12V-139
18	Load Trail, LTD	13V-129
19	Magic Tilt Trailers, Inc.	13V-188
20	Maxey Trailers	12V-156
21	Midsota Mfg., Inc.	12V-155
22	Mo Trailer Corp.	12V-144
23	Neckover Trailers	12V-272
24	New Heights LLC.	13V-191
25	Newmar Corp	12V-203
26	Performance Trailers	12V-210
27	PJ Trailers Mfg	12V-174
28	Roadclipper Enterprises	12V-152
29	Rolls Rite Trailer Inc	12V-213
30	Royal Cargo	12V-229
31	Stoll Trailer Inc	12V-233

32	Texas Pride	12V-335
33	Tiger Trailers	12V-234
34	Trail Master Trailers	12V-223
35	Triad Trailer	12V-208
36	United Expressline, Inc.	12V-209
37	UTC Cargo Group	12V-219
38	Wilson Trailer Co	12V-206

Copies of all IR letters and their associated responses can be found in this Equipment Query's document repository by clicking the "Associated Documents" button.

This Equipment Query is closed.