



DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

Denial of Motor Vehicle Defect Petition, DP10-002

AGENCY: National Highway Traffic Safety Administration (NHTSA).

ACTION: Denial of Petition for a Defect Investigation.

SUMMARY: This notice describes the reasons for denying a petition (DP10-002) submitted to NHTSA under 49 U.S.C. Subtitle B, Chapter V, Part 552, Subpart A, requesting that the agency conduct “an investigation of defective products manufactured by Dayton Wheel Concepts, Inc. (‘Dayton Wheel’ and American Wire Wheel, LLC (‘American Wheel’).” The petition listed the allegedly defective products and the alleged defect (which varied by allegedly defective product).

FOR FURTHER INFORMATION CONTACT: Bob Young, Office of Defects Investigation (ODI), NHTSA; 1200 New Jersey Ave., SE; Washington, DC 20590. Telephone: 202-366-4806.

SUPPLEMENTARY INFORMATION: By a letter dated December 31, 2009, Mr. Thomas M. Gisslen; 707 Miamisburg-Centerville Rd. #158; Dayton, OH 45459, through his lawyer John R. Folkerth, JR; 109 North Main Street; 500 Performance Place; Dayton, OH 45402; petitioned the NHTSA requesting that it investigate “defective products manufactured by Dayton Wheel

Concepts, Inc. ('Dayton Wheel' and American Wire Wheel, LLC ('American Wheel'))" and that the Agency "order...Dayton Wheel [to] remedy the indicated design defects and to cease and desist from the manufacture of the defective products until such time as the indicated design defects have been corrected, that all inventory of such defective product be impounded and destroyed, that all defective product be recalled, and that [Dayton Wheel] provide the notice specified in 49 U.S.C. 30118 and 30119" [basically that Dayton conduct a safety recall of the allegedly defective product(s) and so notify the NHTSA].

NHTSA has reviewed the material provided by the petitioner and other pertinent data. The results of this review and our analysis of the petition's merit is set forth in the DP10-002 Petition Analysis Report, published in its entirety as an appendix to this notice.

For the reasons presented in the petition analysis report, there is no reasonable possibility that an order concerning the notification and remedy of a safety-related defect would be issued as a result of granting Mr. Gisslen's petition. Therefore, in view of the need to allocate and prioritize NHTSA's limited resources to best accomplish the agency's safety mission, the petition is denied.

Authority: 49 U.S.C. § 30162(d); delegations of authority at CFR 1.50 and 501.8.

Issued on: November 22, 2011

Nancy Lummen Lewis
Associate Administrator
for Enforcement

Billing Code 4910-59-P

APPENDIX

Petition ANALYSIS – DP10-002

1.0 INTRODUCTION

On January 27, 2010, the National Highway Traffic Safety Administration (NHTSA) received a December 31, 2009, letter from attorney John R. Folkerth, Jr. on behalf of his client, Thomas M. Gisslen, petitioning the agency to conduct an “investigation” of certain products manufacturer by Dayton Wheel Concepts, Inc. (including those branded “Dayton” and “American Wire Wheel”) for a range of alleged defects.¹ Mr. Gisslen (the “petitioner”) is “seeking an order requiring Dayton Wheel to remedy the [allegedly] indicated design defects and to cease and desist from the manufacture of the defective products until such time as the [allegedly] indicated design defects have been corrected, that all inventory of such [allegedly] defective product be impounded and destroyed, that all [allegedly] defective product be recalled, and that the manufacturer provide the [recall] notice specified in 49 U.S.C. 30118 and 30119.” In support of his petition, Mr. Gisslen cites: a previous NHTSA investigation (PE02-073) and subsequent safety-related recall (03E-011) of the subject motorcycle wheels; a web-forum discussion concerning the alleged separation of three spokes in a Dayton model D452 60-spoke laced wheel installed on a 1958 MGA, photographs of purportedly defective Dayton wheel components, photographs of rim cracking in the nipple dimple area on a customer’s Dayton “BA” radially-laced motorcycle wheel taken proximate to June 6, 2007, a web-forum discussion concerning quality concerns with a “21 inch, forty spoke cross-laced American Wire Wheel installed on a Harley FXDB “Street Bob”; internal Dayton e-mail concerning wheel component material, design, and specification, and material related to alleged test failures of certain Dayton products. According to the petitioner, “Dayton Wheel’s [allegedly] defective products constitute a substantial risk of catastrophic personal injury...”²

On March 9, 2010, NHTSA wrote to Dayton requesting certain information. The company’s response was received by us on May 17, 2010. Included was a request, filed pursuant to 49 C.F.R. Part 512, that certain information provided not be released to the public.

On July 26, 2010 the petitioner, through attorney Folkerth, submitted a letter to Ron Medford, NHTSA’s Senior Associate Administrator for Vehicle Safety, covering additional exhibits primarily concerning alleged product failures both in the field and during various laboratory tests. Many of the exhibits simply duplicated what was in NHTSA’s public file for this petition (DP10-002).

¹ Hired on September 6, 2006, Dayton Wheel (“Dayton”) terminated Mr. Gisslen’s employment on September 11, 2007. Gisslen v. Dayton Wheel Concepts, Inc., et. Al. was filed October 6, 2009 on behalf of Mr. Gisslen alleging he was wrongfully terminated (Montgomery County Ohio, 2009 CV 08163). Subsequently, Mr. Gisslen petitioned the Agency.

² John R. Folkerth, Jr., Esq., to Administrator, National Highway Traffic Safety Administration, Washington, DC, 31 December 2009, page 5.

On June 24, 2011, the petitioner (no longer represented by Mr. Folkerth) submitted additional information by E-mail to NHTSA. The thrust of the e-mail (and a duplicate sent on June 28, 2011) was his opining that Dayton had not thoroughly and completely responded to our March 9th inquiry.

For purposes of this analysis, “Dayton” refers to Dayton Wire Wheel, Inc. including all of its divisions, subsidiaries (whether or not incorporated, including American Wire Wheel and Dayton Wheel Concepts).

In analyzing the petitioner’s allegations and preparing a response, we:

- ✓ Reviewed the petitioner attorney’s December 31, 2010, and July 26, 2010, letters and exhibits.
- ✓ Reviewed the petitioner’s June 24, 2011, e-mail and attachments.
- ✓ Reviewed the petitioner’s June 28, 2011, e-mail and attachments.
- ✓ Reviewed data provided by Dayton in response to our March 9, 2010, information request.
- ✓ Reviewed a previous NHTSA defect investigation (PE02-073) concerning the alleged sudden and unforeseen catastrophic failure of certain motorcycle wheels produced by Dayton under the brand name “American Wire Wheel” (AWW).
- ✓ Reviewed information related to Dayton’s safety recall (03E-011) of the PE02-073 subject AWW wheels.
- ✓ Reviewed our consumer complaint database for any reports concerning products manufactured by Dayton.
- ✓ Informally interviewed owners of British cars equipped with Dayton wheels at three Washington, DC-area British car shows.
- ✓ Informally interviewed owners of motorcycles equipped with Dayton wheels at three Washington, DC-area custom motorcycle shows.
- ✓ Conducted a wide-ranging, web-based, search for any information (included forum threads) concerning alleged sudden, catastrophic failure of Dayton products.

The information gathered and reviewed during this comprehensive effort fails to establish that a defect trend exists in any of Dayton’s products (including those identified by the petitioner). Consequently, the petition is denied.

2.0 DAYTON WIRE WHEEL HISTORY

Founded in 1916, today Dayton Wire Wheel manufactures laced wheels for sale, predominantly, in the automotive and motorcycle aftermarket.³ Dayton wheels were used by the Wright Brothers and Charles Lindbergh. As an original equipment supplier in the 1930's, Auburn, Cord and Duesenberg automobiles were built with Daytons. All Dayton wheels are produced in Dayton, Ohio.

3.0 THE PETIONERS ALLEGATIONS

The petitioner provided a listing of the Dayton products he alleges are defective. While discussing his claims regarding the “radial spoke” (i.e., the spokes do not cross another between the hub and rim) motorcycle wheels in his letter, the petitioner references an earlier NHTSA defect investigation (PE02-073) and its related safety recall (03E-011) concerning certain motorcycle wheels assembled by Dayton.⁴

3.1 The defective products alleged by the Petitioner

Mr. Gisslen alleges that the following Dayton products have the following “defects:”⁵

Product	Alleged “Defect”
2003-6 BA 40 Radial Spoke Motorcycle Wheel	Hub cracking at spoke flange
19” & 21” Diameter Front Wheel; 40, 80 & 100 Radial Spoke Wheel...all applications	Rim (rolled edge) cracking (splitting) between dimples (spoke holes).
40 Radial Spoke M/C wheel...all sizes and apps	Rim (rolled edge) cracking (splitting) between dimples (spoke holes).
40 Radial Spoke M/C wheel...all sizes and apps	Incorporating non-conforming spokes and nips [nipples] increasing risk of cracking and nip-spoke thread engagement failure.
Motorcycle Drive Pulleys and Rotors...all sizes and apps.	Defective design, material & fabrication increasing risk of cracking and failure.
Automotive wheel lugs and nuts	Extension lug bolts and nuts securing spline- mounted wheels incorporating improper material and manufacturing processes.
All Automotive Wire Wheels	Non-conforming spokes and nips incorporated into wheel assembly, resulting in loss of thread engagement and total failure.

³ Dayton continues to supply original equipment wheels to some vehicle mfrs., including the Morgan Motor Company of County Worcestershire in the UK.

⁴ Folkerth, pages 1-2

⁵ Ibid, pages 4-5.

3.2 NHTSA's Earlier Investigation and Recall

Unlike random spoke breakages and/or other infrequent laced wheel issues, sudden, unforeseen wheel collapse is of particular concern to NHTSA, especially when involving motorcycle wheels. On October 10, 2002, NHTSA opened Preliminary Evaluation (PE) 02-073 after receiving one owner's complaint alleging the *sudden, unforeseen collapse* of a "High Performance Super Spoke" aftermarket rear motorcycle wheel. This wheel had been produced by American Wire Wheel, Inc. (AWW), a division of Hulcher Enterprises in Denton, Texas. While preparing its inquiry to AWW, NHTSA found the company had sold its assets to Dayton Wheel Concepts of Dayton, Ohio (Dayton) on September 3, 2002. Included in the purchase were all materials related to AWW's production of "Super Spoke" model wheels. NHTSA's Office of Chief Counsel (NCC) reviewed materials related to that sale confirming that it involved only a transfer of AWW's assets. Subsequently, NCC requested information from Dunn & Bradstreet concerning AWW's current status and was told the company was no longer in business.

On October 31, 2002, Dayton received ODI's request for information concerning the Super Spoke wheels. Allegedly, prior to receiving the inquiry, only one alleged failure had been disclosed to Dayton by AWW. However, in reviewing AWW's files while preparing its response to our inquiry, Dayton found documentation of nine other Super Spoke spoke-related failures, occurring between February 2000 and September 2002. Of the nine found (for a total of 10 reports), 2 involved injury crashes and all concerned rear wheels manufactured by AWW of Denton, TX. Here is a representative owner statement concerning his August 4, 2002, incident:

"I was riding with a group of people. The rider next to me saw the wheel hopping. I felt it and tried to look down. [It] felt like I hit a bump, that's when the bike dropped and all hell broke loose."

Photos included with the owner's documentation show the wheel collapsed when all 40 spokes pulled away from the hub. On August 24, 2001, AWW paid the owner \$4,177.62 to settle his claim.

During the time it was gathering and reviewing material responsive to ODI's October 31 information request, Dayton assembled 32 Super Spoke wheels using components produced by AWW prior to Dayton's asset purchase. Of these, 24 were rear wheels. On January 21, 2003, Dayton shipped the rear wheels to both Custom Chrome and Drag Specialties, wholesale distributors specializing in aftermarket motorcycle parts.

On February 12, 2003, Dayton recalled all of the wheels it produced (32). In its "Part 573 Defect and Noncompliance Report" filed with the agency for recall 03E-011, it said it was taking this action after determining the wheels "have the potential for complete failure while in use due to steel spokes pulling out of the machined aluminum hub" with a "potential for vehicle crash and resultant serious injuries to riders and passengers." In its remedy, Dayton provided, without cost, a wheel of different design to each affected customer.

4.0 CONSUMER COMPLAINTS

In analyzing this petition's merit, NHTSA was interested in any verifiable real world failure allegations indicating: a) the sudden, unforeseen collapse of any Dayton product including those cited by the Petitioner and, b) if such incidents existed, did their frequency indicate a defect trend existed?

4.1 Real World Failures cited by the Petitioner

With his December 31, 2010, letter and June 24, 2011, e-mail the petitioner alleged there were seven real-world incidents involving Dayton wheels. Of these, four involved automotive wheels and three concerned motorcycle wheels. He also provided information concerning one alleged failure of a motorcycle drive pulley produced by Dayton.

4.1.1 British-Cars.net – Automotive Wheels

The petitioner included a report he found on a web-based forum at British-Cars.net which he characterized as: "A recent wheel failure report surfaced at british-cars.net. Fortunately no one was injured. The failure event was three spokes pulling out of the hub on a single wheel."⁶ Subsequently, we found the subject wheel (a Dayton model D452) was installed on a 1958 MGA owned by a British car enthusiast in West Chester, PA.



The owner posted three different threads, the first on or about February 4, 2008, detailing his experience with the Dayton wheels. His primary concern was his impression that Dayton was not willing to honor the wheels' warranty. Subsequently, the issue was resolved to the owner's satisfaction. At no time did the wheel collapse nor was vehicle controllability compromised by the separation of three spokes on one wheel.

4.1.2 Scott's Classic Imports – Automobile Wheels

The petitioner's December 31 letter included six photographs of a Dayton model D450 15x4 wheel intended for use on Austin Healey, Lotus, MG and Triumph automobiles. According to Dayton, this September 2005 warranty submission for broken spokes came from a now defunct used car dealer in Plympton, MA. No wheel collapse, or loss of vehicle control, was reported.

⁶ Ibid, page 2

4 .1.3 The BA Motorcycle Wheel

The Petitioner included information concerning a 40 spoke, radially laced, rear motorcycle wheel installed on a 1998 Harley FLHRCI “Road King Classic.” Known internally as the “BA” wheel, it was a redesign of the “Super Spoke” wheel produced by American Wire Wheel of Denton, Texas and later recalled by Dayton. In February 2006, the owner contacted Dayton to report that the wheel rim had cracked and would not hold air. After receiving the wheel, Dayton found that, as a result of overloading, the rim was cracked 270 degrees circumferentially. At no time did the wheel collapse.

4 .1.4 V-Twin Forum.com – Motorcycle Front Wheels

The petitioner also included two forum threads from V-Twin Forum.com, both concerning a front wheel installed on a Harley-Davidson motorcycle, one radially-laced of an unspecified make or size and the other cross-laced.

The first posting, by “TacomaWA12” on February 9, 2006, alleges a crash occurred while riding his Harley FLSTC when the front “rim metal between the spokes failed and literally split the rim in two.” He claims the bike sustained an estimated \$4,400 in damage. The thrust of his post was “how can I find out who made the wheel?” because, as the “3rd or 4th owner,” the wheel manufacturer was unknown to him. There have been no entries on this thread since February 22, 2006, and the identity of the wheel manufacturer is unknown. Dayton has no record of this alleged failure and NHTSA has been unable to locate the owner to ascertain whether Dayton produced the wheel which allegedly failed.

The second thread concerned a 21” forty spoke, cross-laced front motorcycle wheel produced under the brand name “American Wire Wheel” by Dayton and installed on Harley FXDB “Street Bob.” Beginning on September 20, 2008, the customer (aka “Sponk”) provides a laundry list of complaints: slow delivery, poor bearing quality, fitment problems, and slow air loss. At no time was a wheel collapse indicated or alleged.

4 .1.5 Motorcycle Drive Pulleys

Appendix K of the petitioner’s December 31 letter purports to document manufacturing defects with Dayton-produced motorcycle belt-drive pulleys for Harley-Davidson fitment. Appendix L is a photo of an alleged customer pulley with a complete hub separation occurring in the summer of 2007. Dayton confirms that this is a customer’s pulley but states it was improperly installed. Witness marks on the hub indicate improper fasteners were used to secure the pulley to the hub.

4 .1.6 Complaints Identified in Gisslen E-mail⁷

⁷ E-mail from Thomas Gisslen to Robert Young, June 24, 2011, page 2.

On June 24, 2011, the Petitioner (Gisslen) alleged that two real-world incidents, within the scope of our December 31 inquiry, had not been identified by Dayton in its March 9, 2011, response. Both incidents involved Swedish customers who had fitted Dayton wire wheels to their automobiles. The first, reported to Dayton in March 2011 (and revealed to the Petitioner during discovery in his civil suit against Dayton), involved an air leakage problem with the Dayton wheels installed on a late-model Ford Thunderbird. No wheel collapse was reported.



The second, occurring in 2005, involved alleged spoke breakage on Dayton wheels installed on a modified Jaguar. No wheel collapse was reported.

Neither of the alleged “failures” documented in these “complaints” were within the scope of our December 31 inquiry.

4.2 Real-World, In-Scope, Complaints Received by Dayton Wire Wheel, Inc.

In requesting customer complaint information from Dayton, we limited the scope of our inquiry to those products identified in the Petitioner’s December 31st letter:

Subject Products:

1. 2003-06 BA 40 spoke, radially-laced, motorcycle wheel;
2. 19 inch, 40 spoke, radially-laced, motorcycle wheel;
3. 19 inch, 80 spoke, radially-laced, motorcycle wheel;
4. 19 inch, 100 spoke, radially-laced, motorcycle wheel;
5. 21 inch, 40 spoke, radially-laced, motorcycle wheel;
6. 21 inch, 80 spoke, radially-laced, motorcycle wheel;
7. 21 inch, 100 spoke, radially-laced, motorcycle wheel;
8. All motorcycle drive pulleys;
9. All motorcycle brake rotors;
10. All extension spline-mounting lugs;
11. All extension spline-mounting lug nuts; and
12. All automotive wire wheels

and the alleged defect was defined as:

Alleged defect: For Subject Products Nos. 1 through 7: any rim and or hub cracking and/or spoke/nipple thread failure *resulting in wheel collapse* [emphasis added]. For

Subject Product Nos. 8 and 9: any *fracturing of the pulley or rotor* [emphasis added]. For Subject Product Nos. 10 and 11: Any failure resulting in clamping force reduction and *wheel separation* [emphasis added]. For Subject Product No. 12: any fracturing of the spoke head and/or any stripping of spoke/nipple threads *resulting in wheel collapse* [emphasis added].⁸

According to Dayton, the company “has never had a report or instances where any problem or issue with Subject Products Nos. 1-7 resulting in a wheel collapse. Similarly, Dayton has never had any report or instance where a problem or issue with Subject Products Nos. 10 and 11 resulted in wheel separation. Dayton has never had any report or instance where any problem or issue with Subject Product No. 12 resulted in wheel collapse. With respect to Subject Products Nos. 8 and 9, Dayton has had one instance where a pulley failed...as a direct result of improper mounting.”⁹

4.3 Real-World Dayton Product Failure Reports in NHTSA’s Consumer Complaint Database

Using the broadest possible search criteria¹⁰ we found five complaints involving Dayton products. Of these, four concerned the “Super Spoke” motorcycle wheels recalled by the company on February 12, 2003, (03E-011). The fifth documented this petition.

4.4 Real-World Dayton Product Failure Allegations on the Web

Using the broadest possible web search criteria,¹¹ we found no reports of Dayton product collapse and/or separation.

4.5 Real-World Dayton Product Experience

In an effort to gather additional information about consumer experience with Dayton products, particularly as it relates to wheel collapse/separation or motorcycle drive pulley collapse, we attended three local British car shows and the same number of custom motorcycle shows. While there, we found some owners displaying vehicles equipped with Dayton wheels and/or (in the case of motorcycles) drive sprockets. No problems with the Dayton products, of any sort, were claimed by any of those we queried.

⁸ Letter from Richard P. Boyd to Charlie Schroeder, March 9, 2010, page 2.

⁹ Folkerth, page 2.

¹⁰ Our searches included those where the manufacturer was identified as “Dayton” and/or “American Wire Wheel” (including wild cards). In the event the wheel manufacturer was not specifically identified, we searched for those complaints where “wheel” or “sprocket” appeared in the complaint summary and then manually reviewed each for any involving a Dayton product.

¹¹ We searched the web using readily available search engines including Google, Bing, and Yahoo for any information related to Dayton product failures. We then looked for those involving collapse and/or separation.

5.0 DAYTON PRODUCT EVALUATIONS

5.1 Petitioner Documentation

In support of his claim that the subject products are “defective” thus constituting “a substantial risk of catastrophic personal injury,” the petitioner cites a number of tests and analyses conducted on behalf of Dayton...the last of these dated February 22, 2006.¹² The Petitioner has characterized these as documented test failures.

5.2 Dayton Documentation

In responding to both the petitioner’s allegations and item numbers 6 and 9 of our March 9, 2010, inquiry, Dayton provided additional information and context. Two items are relevant here: First, the Finite Element Analysis conducted by RHAMM Technologies, LLC of Dayton, Ohio on behalf of Dayton in January 2006 was later found flawed because the analysis parameters did not account for work-hardening of the spoke material. Additionally, RHAMM could not define a real-world failure point within the reasonably expected load limits.¹³

The second relevant item concerns the allegation that testing conducted by Standard Test Labs (STL) on Dayton’s behalf, was invalid. According to Dayton, when this allegation was first made, sometime in 2006, it retained the services of Rexnord Technical Services of Milwaukee, WI to assess STL’s testing and results. Rexnord’s analysis validated STL’s tests and results.¹⁴

6.0 NHTSA ANALYSIS

In assessing the petitioner’s claim that the subject Dayton products are defective, NHTSA reviewed all reasonably available information to determine whether the products were failing in real-world use and, if so, how frequently? After conducting a comprehensive effort to uncover reports of Dayton wheel separation and/or collapse or motorcycle drive pulley failure, we found no such reports concerning Dayton wheels and one (from 2007) involving a drive pulley, the latter apparently resulting from improper installation. If, as the petitioner alleges, the testing results (from 2003-2006) indicated Dayton was producing and selling sub-standard wheels and pulleys, it would follow that real-world failures would have occurred, certainly in the last five years. NHTSA found no such evidence.

¹² John R. Folkerth, Jr., Esq., to Ronald Medford, National Highway Traffic Safety Administration, Washington, DC, 26 July 2010, attachment 8.

¹³ Letter from Jeffrey P. Hinebaugh to Richard P. Boyd, NHTSA, Washington, DC, 14 May 2010, item number 9.

¹⁴ Ibid.

7.0 CONCLUSION

Based on the foregoing analysis, there is no reasonable possibility that an order concerning the notification and remedy of a safety-related defect would be issued as a result of granting Mr. Gisslen's petition. Therefore, in view of the need to allocate and prioritize NHTSA's limited resources to best accomplish the agency's safety mission, the petition is denied.

[FR Doc. 2011-30612 Filed 11/28/2011 at 8:45 am; Publication Date: 11/29/2011]