



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

MAR 9 2004

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ms. Janae Kurtz
Director of Aftermarket Services
Jayco, Inc.
903 S. Main Street
Middlebury, IN 46540

NVS-214gtb
PE04-016

Dear Ms. Kurtz,

The National Highway Traffic Safety Administration (NHTSA) conducts investigations of potential safety defects in motor vehicles and equipment. This function is performed under the authority of the National Highway Vehicle Safety Act, which provides for safety defect notification and recall campaigns to reduce accidents, injuries, and deaths.

This letter is to inform you that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration has opened a Preliminary Evaluation (PE04-016) that seeks information regarding wheel separations occurring in Travel Trailer and Fifth Wheel vehicles manufactured by Jayco, Inc.

On December 10, 2003, in response to an informal peer inquiry from ODI, Jayco provided ODI with a summary of 46 incidents in which a "six-lug" wheel had separated (rolled free) from the vehicle while either being transported to the selling dealer or after the original purchaser had placed the vehicle into service. This summary indicates that four vehicles had experienced more than one separation event. (The summary does not specify whether multiple events had occurred at the same or different wheel mounting positions of the vehicle.) An additional four reports indicate that one or more studs had broken or that the wheel mounting nuts had loosened without a wheel separation occurring. A summary of these incidents is provided as Attachment A.

Jayco also summarized nine incidents in which an "eight lug" wheel had separated from the vehicle and one incident that indicates that one or more studs had broken or that the wheel mounting nuts had loosened without a wheel separation occurring. Vehicle s/n 31KT0123, which was equipped with an "eight lug" wheel, reportedly had experienced more than one wheel separation event. A summary of these incidents is provided as Attachment B.

ODI believes that separated wheels pose a risk to vehicle control and that separated wheel(s) pose a hazard to others in the proximity of the wheel separation event.



DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236

The "eight-lug" wheel configuration should provide greater wheel-to-hub clamp capability than "six-lug" wheel configurations yet wheel separations have occurred in Jayco vehicles equipped with "eight lug" wheels. ODI is concerned about identifying the factors associated with the "six-lug" and "eight-lug" wheel configurations that could be adversely affecting the integrity of the wheel clamp.

Unless otherwise stated in the text, the following definitions apply to these information requests:

- **Subject vehicle**: all travel trailer and fifth wheel vehicles manufactured by Jayco, Inc. since 2000 and sold or leased in the United States.
- **Subject components**: the wheel end assembly consisting of wheels, brake drums or brake rotors, hubs, wheel mounting studs, wheel mounting nuts, and/or spacers, paints, lubricants, coatings and the like that may have been applied to any of the wheel end components installed in subject vehicles.
- **Jayco, Inc. ("Jayco")**: all of its past and present officers and employees, whether assigned to its principal offices or any of its field or other locations, including all of its divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee to a consultant) by or under the control of Jayco (including all business units and persons previously referred to), who are or, in or after 2000 were involved in any way with any of the following related to the alleged defect in the subject vehicles:
 - a. Design, engineering, analysis, modification or production (e.g. quality control);
 - b. Testing, assessment or evaluation;
 - c. Consideration, or recognition of potential or actual defects, reporting, record-keeping and information management, (e.g., complaints, field reports, warranty information, part sales), analysis, claims, or lawsuits; or
 - d. Communication to, from or intended for zone representatives, fleets, dealers, or other field locations, including but not limited to people who have the capacity to obtain information from dealers.
- **Alleged defect**: unintended loosening or separation of a wheel from a subject vehicle at highway speeds.
- **Document**: "Document(s)" is used in the broadest sense of the word and shall mean all original written, printed, typed, recorded, or graphic matter whatsoever, however produced or reproduced, of every kind, nature, and description, and all non-identical copies of both sides thereof, including, but not limited to, papers, letters, memoranda, correspondence, communications, electronic mail (e-mail) messages (existing in hard copy and/or in electronic storage), faxes, mailgrams, telegrams, cables, telex

messages, notes, annotations, working papers, drafts, minutes, records, audio and video recordings, data, databases, other information bases, summaries, charts, tables, graphics, other visual displays, photographs, statements, interviews, opinions, reports, newspaper articles, studies, analyses, evaluations, interpretations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, instructions, blueprints, drawings, as-builts, changes, manuals, publications, work schedules, journals, statistical data, desk, portable and computer calendars, appointment books, diaries, travel reports, lists, tabulations, computer printouts, data processing program libraries, data processing inputs and outputs, microfilms, microfiches, statements for services, resolutions, financial statements, governmental records, business records, personnel records, work orders, pleadings, discovery in any form, affidavits, motions, responses to discovery, all transcripts, administrative filings and all mechanical, magnetic, photographic and electronic records or recordings of any kind, including any storage media associated with computers, including, but not limited to, information on hard drives, floppy disks, backup tapes, and zip drives, electronic communications, including but not limited to, the Internet and shall include any drafts or revisions pertaining to any of the foregoing, all other things similar to any of the foregoing, however denominated by Jayco, any other data compilations from which information can be obtained, translated if necessary, into a usable form and any other documents. For purposes of this request, any document which contains any note, comment, addition, deletion, insertion, annotation, or otherwise comprises a non-identical copy of another document shall be treated as a separate document subject to production. In all cases where original and any non-identical copies are not available, "document(s)" also means any identical copies of the original and all non-identical copies thereof. Any document, record, graph, chart, film or photograph originally produced in color must be provided in color. Furnish all documents whether verified by the manufacturer or not. If a document is not in the English language, provide both the original document and an English translation of the document.

- **Other Terms:** To the extent that they are used in these information requests, the terms "claim," "consumer complaint," "dealer field report," "field report," "fire," "fleet," "good will," "make," "model," "model year," "notice," "property damage," "property damage claim," "rollover," "type," "warranty," "warranty adjustment," and "warranty claim," whether used in singular or in plural form, have the same meaning as found in 49 CFR 579.4.

In order for my staff to evaluate the alleged defect and determine whether the part 573 Report was filed late, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following information requests. When documents are produced, the documents shall be produced in an identified, organized manner that corresponds with the organization of this information request letter (including all individual requests and subparts). When documents are produced and the documents would not, standing alone, be self-explanatory, the production of documents shall be supplemented and accompanied by explanation.

Please repeat the applicable request verbatim above each response.

After Jayco's response to each request, identify the source of the information and indicate the last date the information was gathered.

To the extent possible, provide the requested information in Microsoft Access 2000 electronic format.

POPULATION INFORMATION - TRAVEL TRAILERS AND FIFTH WHEEL TRAILERS

1. Provide a table that identifies by model and model year the number of (a) Travel Trailers and (b) Fifth Wheel Trailers that Jayco has manufactured for sale or lease in the United States since January 1, 2000.

Provide the table in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER ONE - PRODUCTION DATA."

2. Provide a separate table for Travel Trailer vehicles that identifies by model and model, the number of Jayco Travel Trailers equipped with:
 - (a) aluminum wheels and "five lug" mounting;
 - (b) aluminum wheels with "six lug" mounting;
 - (c) aluminum wheels with "eight lug" mounting;
 - (d) steel wheels with "five lug" mounting;
 - (e) steel wheels with "six lug" mounting;
 - (f) steel wheels with "eight lug" mounting;
 - (g) any "other" wheel material and/or mounting configurations that Jayco used to install wheels on Travel Trailer vehicles manufactured since 2000. (Provide a brief description of each additional wheel mounting configuration and wheel material listed.)

Provide the table in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER TWO - PRODUCTION DATA FOR TRAVEL TRAILERS BY WHEEL CONFIGURATION."

3. Provide a separate table for Fifth Wheel Trailers that identifies by model and model, the number vehicles equipped with:
 - (a) aluminum wheels and "five lug" mounting;
 - (b) aluminum wheels with "six lug" mounting;
 - (c) aluminum wheels with "eight lug" mounting;
 - (d) steel wheels with "five lug" mounting;
 - (e) steel wheels with "six lug" mounting;

- (f) steel wheels with "eight lug" mounting;
- (g) any "other" wheel material and/or mounting configurations that Jayco used to install wheels on Fifth Wheel Trailer vehicles manufactured since 2000. (Provide a brief description of each additional wheel mounting configuration and wheel material listed.)

Provide the table in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER THREE – PRODUCTION DATA FOR FIFTH WHEEL TRAILERS BY WHEEL CONFIGURATION."

WHEEL SEPARATION EVENT SUMMARY -

- 4. For the wheel separation events that have been reported to Jayco, or of which Jayco is aware, provide a table that summarizes the number of wheel separation events that have occurred on Travel Trailer vehicles within each of the sub-populations of models, model years, and wheel configurations listed in response to Request No.2.

Provide the table in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER FOUR – TRAVEL TRAILER WHEEL SEPARATIONS SUMMARY GROUPED BY WHEEL CONFIGURATION, VEHICLE MODEL, AND MODEL YEAR."

- 5. For the wheel separation events that have been reported to Jayco, or of which Jayco is aware, provide a table that summarizes the number of wheel separation events that have occurred on Fifth Wheel Trailer vehicles within each of the sub-populations of models, model years, and wheel configurations listed in response to Request No. 3.

Provide the table in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER FIVE – FIFTH WHEEL TRAILER WHEEL SEPARATIONS SUMMARY GROUPED BY WHEEL CONFIGURATION, VEHICLE MODEL AND MODEL YEAR."

- 6. Provide a separate table that further groups the incidents summarized in response to Request No. 4 and 5, by (a) the number of incidents that have occurred during transport of the vehicle to the selling dealer or original purchaser and (b) the number of incidents that have occurred after the vehicle was delivered to the original purchaser and placed into service.

Provide the table in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER SIX – WHEEL SEPARATION INCIDENT PROFILE."

WHEEL SEPARATION INCIDENT INFORMATION -

7. For each wheel separation event that has occurred in the vehicles listed in response to Requests Nos.2 and 3, provide a table that identifies:
- a) Jayco's file number or other identifier used;
 - b) The category of the information source (i.e., pre-delivery report, dealer report, warranty claim, consumer complaint, field report, etc.);
 - c) Vehicle owner's name, address, and telephone number;
 - d) Vehicle's VIN;
 - e) Vehicle's model and model year;
 - f) Vehicle's mileage at time of incident;
 - g) Incident date;
 - h) Report or claim date;
 - i) Whether the separated wheel and/or any mounting components was recovered and, if so, the disposition of these components (Note: All reports of returned parts inspections should be provided in response to Request No. 6.);
 - j) Whether a crash is alleged;
 - k) Whether property damage is alleged;
 - l) Number of alleged injuries, if any; and
 - m) Number of alleged fatalities, if any.

Provide the table in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER SEVEN - INCIDENT INFORMATION."

8. Provide an explanation why the "report date" precedes the "production date" in several of the incidents that Jayco listed on the December 10, 2003 summary.

TECHNICAL INFORMATION REGARDING WHEEL SEPARATIONS -

9. For each wheel separation event that has occurred in the vehicles listed in response to Requests No.2 and 3, provide a table that provides:
- (a) the VIN number of the incident vehicle;
 - (b) the Jayco part number for the wheels installed;
 - (c) the supplier's part number for the wheels installed;
 - (c) the name and address of the supplier for the wheels installed;
 - (d) the Jayco part number for the axle assembly installed;
 - (e) the supplier's part number for the axle assembly installed;
 - (f) the name and address of the axle assembly supplier (if the wheel mounting hub was not supplied as a part of the axle assembly, so state, and provide the requested

information for the hub supplier);

(g) the nominal diameter and thread pitch of the wheel mounting studs where the wheel mounting nuts are attached;

(h) a copy of an engineering drawing that depicts the wheel and contains the following information: the material that the wheel is made of, the thickness of the wheel at the mounting flange, the number, nominal size (diameter), and mounting circle of the wheel mounting holes, a description of the profile of the wheel mounting nut at the wheel mounting nut interface, and whether the wheel is intended to be hub piloted or stud piloted;

(i) a brief description of any and all lubricants, coatings, paint, spacers, or the like that Jayco or its suppliers or sub-contractors applied to the mounting faces of the hub, brake drum or rotor, wheel, wheel mounting studs or wheel mounting nut. The description should include an estimate of the thickness of any lubricants, coatings, paint, etc. applied and a description of the area and location of the component to which the material was applied;

(j) a copy of the authorization that the wheel was "released for production use" by Jayco Engineering;

(k) a copy of all tests and analysis that Jayco Engineering used a basis for evaluating the durability and performance characteristics of the wheel prior to and/or at the time that the wheel was "released for production use" whether these tests or analyses were conducted by Jayco Engineering, Jayco's suppliers, sub-contractors, affiliates, etc.

(l) identify any application and/or loading restrictions, conditions, or limitations that Jayco identified prior to, or concurrent with, or after the time that the wheel was "released for production use."

Provide the table in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER NINE – TECHNICAL INFORMATION."

<p>Note: Jayco may provide the information in Request No. 9 in summary format if the information can be summarized in logical sets or families of vehicle models, production periods, or other parameters that contain identical wheel end components.</p>
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MANUFACTURER'S INVESTIGATION -

10. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Jayco.

This information should include inspections of any components returned from the field due to wheel separation or loosening. This information should include information

developed by Jayco as well as information and inspection results developed by suppliers, sub-contractors, etc.

For each such action, provide the following information:

- (a) Action title or identifier;
- (b) The actual or planned start date;
- (c) The actual or expected end date;
- (d) Brief summary of the subject and objective of the action;
- (e) Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
- (f) A brief summary of the findings and/or conclusions resulting from the action.

Provide the table in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER TEN – MANUFACTURER'S INVESTIGATION INFORMATION."

11. Describe all modifications or changes made by, or on behalf of, Jayco in the design, material composition, manufacture, quality control, supply, or installation of the subject components, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject vehicles. For each such modification or change, provide the following information:

- a) The date or approximate date on which the modification or change was incorporated into vehicle production;
- b) A detailed description of the modification or change;
- c) The reason(s) for the modification or change;
- d) The part numbers (service and engineering) of the original component;
- e) The part number (service and engineering) of the modified component;
- f) Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
- g) When the modified component was made available as a service component; and,
- h) Whether the modified component can be interchanged with earlier production components.

Also, provide the above information for any modification or change that Jayco is aware of which may be incorporated into vehicle production within the next 120 days.

Note: All changes intended to improve the integrity and durability of the wheel mounting system that were implemented in response to wheel separation and wheel loosening should be clearly identified as such.

Provide the table in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER ELEVEN – MANUFACTURER'S PRODUCT CHANGES."

"SIX - LUG" WHEEL END CONFIGURATION -

12. Provide the nominal wheel end clamp capability value and/or range of values that Jayco has established for a "typical" six-lug (a) steel and (b) aluminum wheel mounting configuration. Specify the nominal diameter of the wheel mounting studs, the number of wheel mounting studs, and mounting circle for the wheel mounting studs used to determine the clamp capability.
13. Provide the methodology, source, and/or basis that Jayco used to measure, calculate or otherwise establish the clamp capability provided in Response to Request No. 12.
14. Describe all known differences, if any, between "typical" six-lug wheel end configurations wheel end assemblies installed in Jayco vehicles and the six-lug wheel end configurations identified in Attachment A.
15. Provide the value and/or range of values for the wheel end clamp requirements for vehicles (1) equipped with the "typical" six- lug wheel end configuration and (2) vehicles listed in Attachment A.

State whether there is a difference between clamp requirements for wheels installed in travel trailers compared to the equivalent wheels installed on fifth wheel trailers and the reasons for these differences, if any.

16. Describe in detail how Jayco determined the value and/or range of values for the wheel end clamp requirements summarized in response to Request No. 15.

EIGHT - LUG WHEEL END CONFIGURATION -

17. Provide the nominal wheel end clamp capability value and/or range of values that Jayco has established for a "typical" eight-lug (a) steel and (b) aluminum wheel mounting configuration. Specify the nominal diameter of the wheel mounting studs, the number of wheel mounting studs, and mounting circle for the wheel mounting studs used to determine the clamp capability.
18. Provide the methodology, source, and/or basis that Jayco used to measure, calculate or otherwise establish the clamp capability provided in Response to Request No. 17.
19. Describe all known differences, if any, between the "standard" or "typical" eight-lug wheel end configurations and the eight-lug wheel end configurations listed in Attachment B.

20. Provide the value and/or range of values for the wheel end clamp requirements for vehicles (1) equipped with the "typical" eight - lug wheel end configuration and (2) vehicles listed in Attachment B.

State whether there is a difference between clamp requirements for wheels installed in travel trailers compared to the equivalent wheels installed on fifth wheel trailers and the reasons for these differences, if any.

21. Describe in detail how Jayco determined the value and/or range of values for the clamp requirements summarized in response to Request No.20.

INSTALLATION, ASSEMBLY TORQUE AND RE-TORQUE INFORMATION

22. For each of the wheel end mounting configurations listed in response to Request No. 2 and 3, provide a copy of (A) the procedures used at the initial wheel mounting installation and torquing of the wheel nuts; (B) the procedures used for all torque, re-torque or torque checks performed on the wheel mounting nuts during and after the initial wheel mounting and assembly; (C) the procedures used for all re-torque or torque checks conducted prior to delivery of the vehicle to the dealer; (D) the wheel mounting nut torque procedures and intervals (frequency) that Jayco recommends that the delivering dealer perform prior to delivering a new vehicle to the purchaser; (E) the wheel mounting nut torque procedures and intervals (frequency) that Jayco recommends that vehicle owners perform; (F) all other wheel mounting nut torque, retorque, or checking procedures issued or recommended by Jayco.

MANUFACTURER'S ASSESSMENT -

23. Provide a brief discussion of the anticipated differences between the frequency, magnitude, and nature of the forces imposed on the trailer wheel mounting and retention system installed in a recreational vehicle travel trailer (i.e. a trailer towed and maneuvered by a ball-stud style trailer hitch) compared to the forces imposed on the trailer wheel mounting and retention system installed in a recreational "Fifth Wheel" trailer vehicle towed and maneuvered by a fifth wheel towing system.
24. Furnish Jayco's assessment of the alleged defect in the subject vehicle, including:
- (a) The causal or contributory factor(s);
 - (b) The failure mechanism(s);
 - (c) The failure mode(s),
 - (d) The risk to motor vehicle safety that posed

(e) What warnings, if any, the operator and the other persons both inside and outside the vehicle would have that the alleged defect was occurring or subject component was malfunctioning.

NOTICES-

25. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that Jayco has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that Jayco is planning to issue within the next 120 days.

This letter is being sent to Jayco pursuant to 49 U.S.C. § 30166, which authorizes NHTSA to conduct any investigation that may be necessary to enforce Chapter 301 of Title 49 and to request reports and the production of things. It constitutes a new request for information. Jayco's failure to respond promptly and fully to this letter could subject Jayco to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163. (Other remedies and sanctions are available as well.) Please note that maximum civil penalties under 49 U.S.C. § 30165 have increased as a result of the recent enactment of the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act, Public Law No. 106-414 (signed November 1, 2000). Section 5(a) of the TREAD Act, codified at 49 U.S.C. § 30165(b), provides for civil penalties of up to \$5,000 per day, with a maximum of \$15 million for a related series of violations, for failing or refusing to perform an act required under 49 U.S.C. § 30166. This includes failing to respond to ODI information requests.

If Jayco cannot respond to any specific request or subpart(s) thereof, please state the reason why it is unable to do so. If on the basis of attorney-client, attorney work product, or other privilege, Jayco does not submit one or more requested documents or items of information in response to this information request, Jayco must provide a privilege log identifying each document or item withheld, and stating the date, subject or title, the name and position of the person(s) from, and the person(s) to whom it was sent, and the name and position of any other recipient (to include all carbon copies or blind carbon copies), the nature of that information or material, and the basis for the claim of privilege and why that privilege applies.

Jayco's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by April 30, 2004. Please refer to PE04-016 in Jayco's response to this letter. If Jayco finds that it is unable to provide all of the information requested within the time allotted, Jayco must request an extension from me at (202) 366-

4933 no later than five business days before the response due date. If Jayco is unable to provide all of the information requested by the original deadline, it must submit a partial response by the original deadline with whatever information Jayco then has available, even if an extension has been granted.

If Jayco claims that any of the information or documents provided in response to this information request constitute confidential commercial material within the meaning of 5 U.S.C. § 552(b)(4), or are protected from disclosure pursuant to 18 U.S.C. § 1905, Jayco must submit supporting information together with the materials that are the subject of the confidentiality request, in accordance with 49 CFR Part 512, to the Office of Chief Counsel (NCC-113), National Highway Traffic Safety Administration, Room 5219, 400 Seventh Street, S.W., Washington, D.C. 20590. Jayco is required to submit two copies of the documents containing allegedly confidential information (except only one copy of blueprints) and one copy of the documents from which information claimed to be confidential has been deleted.

If you have any technical questions concerning this matter, please call Mr. Tom Bowman of my staff at (202) 366-6961.

Sincerely,



Richard Boyd, Chief
Medium & Heavy Duty Vehicle Division
Office of Defects Investigation

