



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: EA04-020
 Prompted By: PE04-030
 Date Opened: 07/22/2004 Date Closed: 04/28/2005
 Principal Investigator: Kyle Bowker
 Subject: Steel Wheel Fracture

Manufacturer: Kia Motors America, Inc.
 Products: 2001 Kia Rio
 Population: 24,371

Problem Description: Standard equipped 13x5J steel wheels fracture in a circumferential pattern on the wheel disc at or around the wheel hat area.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	16	29	40
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
# Injuries:	0	0	0
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	0	535	535

*Description of Other: Warranty claims paid for replacement of 1 or more wheels on the subject vehicles due to fracture.

Action: This Engineering Analysis has been closed. The manufacturer will conduct a safety recall (05V-159).

Engineer: Kyle M. Bowker KMB
 Div. Chief: Jeffrey L. Quandt
 Office Dir.: Kathleen C. DeMeter

Date: 04/28/2005
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Summary: On March 24, 2004, the Office Of Defects Investigation (ODI) opened a Preliminary Evaluation (PE04-030) to investigate alleged steel wheel fractures in certain model year (MY) 2001 Kia Rio vehicles. The subject vehicles are equipped with wheels manufactured from May 12 through October 17, 2000. Wheels were manufactured during this period using a tool (ring die) that had improper surface treatment. This allowed tool damage to develop with accumulated use and resulted in an irregular shaped stamping on the wheel disc at the hat area. The irregular shaped hat area creates a stress riser that may lead to the formation of cracks.

ODI is aware of 40 non-duplicative consumer reports alleging wheel fracture, 6 of which alleged wheel separation incidents on the subject vehicles. As of March 31, 2005, Kia Motors America, Inc. (Kia) has paid 535 warranty claims for the replacement of one or more wheels on the subject vehicles due to fracture.

By letter dated April 18, 2005, Kia has notified ODI that it will conduct a safety recall (NHTSA Recall No. 05V-159) to replace defective wheels in approximately 24,119 subject vehicles. Kia will replace all four steel wheels free of charge. The action taken by Kia is sufficient to resolve the issues raised by this investigation. Accordingly, this investigation is closed.

KMB
4.28.05