

## **ODI RESUME**

U.S. Department of Transportation National Highway Traffic Safety

Administration

Investigation:PE 10-035Date Opened:08/27/2010Investigator:Kyle BowkerApprover:Frank BorrisSubject:Steering Shaft Separation

Date Closed: 02/07/2011 Reviewer: Jeff Quandt

## MANUFACTURER & PRODUCT INFORMATION

| Manufacturer:        | HYUNDAI MOTOR COMPANY   |  |  |
|----------------------|---|--|--|
| Products:            | 2011 Hyundai Sonata   |  |  |
| Population:          | 139,500   |  |  |
| Problem Description: | The intermediate steering shaft allegedly became loose or in some cases separated from the upper steering column and/or the steering gearbox resulting in a complete loss of steering capability. |  |  |

| FAILURE REPORT SUMMARY   |     |              |       |  |
|--|-----|--------------|-------|--|
|  | ODI | Manufacturer | Total |  |
| Complaints:  | 1   | 6            | 7     |  |
| Crashes/Fires:   | 0   | 0            | 0     |  |
| Injury Incidents:  | 0   | 0            | 0     |  |
| Fatality Incidents:  | 0   | 0            | 0     |  |
| Other*:  | 0   | 10           | 10    |  |
| *Description of Others Warranty alaims paid by the manufacturer to remady the alloged defect |     |              |       |  |

\*Description of Other: Warranty claims paid by the manufacturer to remedy the alleged defect.

## **ACTION / SUMMARY INFORMATION**

Action: This Preliminary Evaluation has been closed. The manufacturer will conduct a safety recall (10V-426).

## Summary:

The Office of Defects Investigation (ODI) is aware of 7 complaints and field reports and 10 warranty claims on the subject vehicles that allege the intermediate steering shaft became loose or in some cases separated from the upper steering column and/or the steering gearbox, causing (or potentially causing) the hand wheel to become mechanically de-coupled from the road wheels resulting in a complete loss of steering capability. The reported causes include excessive free play or separation of the intermediate steering shaft upper and/or lower universal joint cross shaft/yoke; missing, loose or damaged universal joint pinch bolts; improperly assembled intermediate steering shafts with misaligned splines or insufficient spline engagement preventing the universal joint pinch bolt from being secured in the retaining groove when fastened.

On September 20, 2010, the manufacturer notified the agency that it would conduct a safety recall (NHTSA Recall No. 10V-426) to address the alleged defect in approximately 139,500 subject vehicles produced from December 11, 2009 through September 10, 2010. In addition to inspecting the steering shaft, the manufacturer will also update the electric power-assist steering control software to address complaints that the steering wheel vibrates or shakes as a result of a a motor driven power steering malfunction. The manufacturer began notifying affected owners by written letter on October 14, 2010. To date, 119,383 subject vehicles have been serviced under the recall campaign and 58 subject vehicles have received replacement parts as a result. Accordingly, this investigation is closed.