



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** PE 10-032  
**Date Opened:** 08/23/2010  
**Investigator:** Michael Lee  
**Approver:** Frank Borris  
**Subject:** Fuel Spill During Refueling

**Date Closed:** 02/16/2011  
**Reviewer:** Scott Yon

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** CHRYSLER GROUP LLC  
**Products:** 2007-2008 Jeep Wrangler  
**Population:** 223,036

**Problem Description:** Fuel spills out or spits back from the filler port during refueling.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	473	142	615
<b>Crashes/Fires:</b>	0	0	0
<b>Injury Incidents:</b>	0	0	0
<b>Number of Injuries:</b>	3	0	3
<b>Fatality Incidents:</b>	0	0	0
<b>Other*:</b>	0	895	895

\*Description of Other: Warranty Claims

## ACTION / SUMMARY INFORMATION

**Action:** Close this Preliminary Evaluation.

### Summary:

ODI found the rate of warranty claims related to fuel spit back on the subject vehicles is lower than other vehicles previously recalled to correct defects related to fuel spit back. Although the rate of complaints reported to the agency on the subject vehicles is higher than or similar to the rates experienced in previous investigations where safety recalls were conducted, ODI suspects that the NHTSA safety complaints submitted by subject vehicles owners may have been influenced by internet related publicity both before and during this investigation.

A safety-related defect trend has not been identified at this time and further use of agency resources does not appear to be warranted. Accordingly, this investigation is closed. The closing of this investigation does not constitute a finding by NHTSA that no safety-related defect exists. The agency will monitor the issue and reserves the right to take future action if warranted by the circumstances. See attached report for additional information.

In addition, Chrysler is initiating a lifetime warranty program, at no cost to the consumer, to address the fuel spit back problem in approximately 135,000 model year 2007-2008 Jeep Wrangler vehicles built from March 1, 2007 to March 31, 2008. Chrysler will notify all affected vehicle owners of this action. Consumers should refer to the warranty and service bulletins and sample owner notification letter available in the investigative file. The vehicle build date can be found on the certification label located on the driver door or door jamb.

Additional Information:

The complaints allege that while refueling the vehicle, fuel can spill out or spit back from the filler port. Some of the complaints also allege the fuel can splash on the person fueling the vehicle. Three complaints reported minor injuries when fuel got in the eyes causing irritation or when fuel splashed on the foot causing a “gas burn,” a form of skin irritation.

Chrysler states the fuel tank’s inlet check valve, which is designed to close at the completion of refueling process, can stick in the open position and allow fuel to spit back from the filler port. According to Chrysler, testing showed the use of fuels with ethanol content greater than that found in E10 (10% ethanol) fuel can cause the inlet check valve’s poppet to expand resulting in inadequate clearance between the valve’s poppet and housing. According to Chrysler, the subject vehicles are designed for fuels such as E10 or regular unleaded and not for flexible fuel E85 (85% ethanol) or other ethanol blends. The types of fuel that are being used in the vehicles experiencing fuel spit back conditions in the field are not known.

Chrysler did not identify any specific root cause of fuel spit back nor any relevant design or manufacturing issues on model year 2005 through 2010 Jeep Wrangler vehicles. Nevertheless, ODI has identified a subset of the Wrangler vehicles – approximately 135,000 vehicles built between March 2007 and March 2008 – having higher rates of complaints and warranty claims than the model year 2007-2008 Wranglers built outside of the production period, as well as other model year Wranglers (2005-2006 and 2009-2010). ODI found the warranty claim rate of the suspect population is about 0.5 percent of vehicles, or a time exposure-adjusted rate of less than 0.2 percent per year, which is lower than the warranty rates experienced in previous investigations where safety recalls were conducted to correct defects related to fuel spit back.

NHTSA has received a high number of complaints (473) on model year 2007-2008 Jeep Wrangler vehicles. Significant reporting of complaints began on October 11, 2009 – the date that a Wrangler owner posted the internet link to the agency’s safety complaint form on an internet forum (jk-forum.com), titled “The Ultimate Jeep JK Wrangler Bulletin Board.” The complaint link was posted with a message urging other owners to file complaints with NHTSA. Several other Wrangler owners reposted the complaint link with similar messages. ODI found that many owners filed the complaints after seeing the internet messages. ODI believes the increased reporting of the complaints is the result of the internet related publicity, making the number of complaints artificially high.