

ATTACHMENT 2

Mr. John Elkann
Chairman
Fiat SpA
250 Via Nizza
Turin, Italy 10126
011-39-006-1111

15 March 2013

Subject: United States Government Safety Defect Investigation EA12-005 – Jeep Fire Death/Injury

References: Mr. Remington Cole, Mrs. Susan Kline, Mrs. Ana Pina, Jeep Fire Death/Injury Victims

Five Pages:

The three iterations of the NHTSA Jeep fuel system defect investigation.

The current status of [Engineering Analysis 12-005](#) resulted from the following assessment by NHTSA:

“NHTSA's assessment of the data collected during Preliminary Evaluation (PE) 10-031 indicates that rear-impact-related tank failures and vehicle fires are more prevalent in the JGC than in the non-Jeep peer vehicles.”


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Defects - Search Results

1 Record(s) Displayed.

Report Date : March 14, 2013 at **04:17 PM**

NHTSA Action Number : EA12005

NHTSA Action Number : **EA12005**

NHTSA Recall Campaign Number : N/A

Vehicle Make / Model:

JEEP / CHEROKEE

JEEP / GRAND CHEROKEE

JEEP / LIBERTY

Model Year(s):

1993-2001

1993-2004

2002-2007

Manufacturer(s) :

Chrysler Group LLC

Component(s) :

FUEL SYSTEM, GASOLINE:DELIVERY:HOSES, LINES/PIPING, AND FITTINGS

FUEL SYSTEM, GASOLINE:STORAGE

FUEL SYSTEM, GASOLINE:STORAGE:TANK ASSEMBLY

FUEL SYSTEM, GASOLINE:STORAGE:TANK ASSEMBLY:FILLER PIPE AND CAP

Date Investigation Opened : June 12, 2012

Date Investigation Closed : **Open**

Summary:

NHTSA has conducted extensive analysis of the data regarding fuel tank integrity for the model year (MY) 1993-2004 Jeep Grand Cherokee (JGC). As a result of that work, the agency has decided to upgrade its safety defect investigation to an Engineering Analysis and to expand the scope of vehicles included in the investigation. NHTSA's assessment of the data collected during Preliminary Evaluation (PE) 10-031 indicates that rear-impact-related tank failures and vehicle fires are more prevalent in the JGC than in the non-Jeep peer vehicles. In addition, the agency's analysis of its FARS data for the peer vehicles and three Jeep models shows a higher incidence of rear-impact, fatal fire crashes for the Jeep products. PE10-031 had focused on the fuel tank system integrity of the JGC vehicles during rear-end collisions and impacts. The fuel tank is located at the rear of the vehicle, between the bumper and axle, and is manufactured from a plastic material (HDPE). Three peer vehicles (across the same MY range as the JGC) were identified for comparative assessment: the Chevrolet Blazer, Ford Explorer, and Toyota 4Runner. ODI has collected and assessed a significant volume of data for the JGC and three peer vehicles under the Defect Petition (DP) 09-005 and PE10-031, much of which was either provided by the petitioner or by the subject and peer manufacturers in response to ODI's information request letters. NHTSA has also utilized its FARS database. Fatal crash data was collected for the JGC and its three peers, along with data for two other Jeep vehicles, the Cherokee and Liberty, which were also manufactured with rear mounted fuel tanks and assessed by ODI as Jeep peer vehicles. Based on the agency's current analysis, ODI has upgraded its investigation to determine whether the subject vehicles contain a defect that presents an unreasonable risk to safety. The subject vehicles for the investigation will be MY 1993-2004 JGC, MY 1993-2001 Cherokee, and MY 2002-2007 Liberty. The estimated production volumes for these vehicles are shown above, although attrition is a factor for the older vehicles. Please note that the counts shown in the above failure report summary are for the JGC only (values shown in the total column are unique). Data for the other Jeep models and possibly other peer models will be collected during the investigation. The ODI reports cited above can be reviewed online at www-odi.nhtsa.dot.gov/complaints under the following identification (ODI) numbers: JGC: 506249, 549376, 734783, 869217, 10009553, 10335943, 10351589, 10351980, 10357528. Liberty: 10357195, 10366653 (duplicate of 10357195), 10138726, 10149256, 10181332 Cherokee: 10409104


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1 Record(s) Displayed.

Report Date : March 14, 2013 at *04:21 PM*

NHTSA Action Number : PE10031

NHTSA Action Number : **PE10031**

NHTSA Recall Campaign Number : N/A

Vehicle Make / Model:

JEEP / GRAND CHEROKEE

Model Year(s):

1993-2004

Manufacturer(s) :

Chrysler Group LLC

Component(s) :

FUEL SYSTEM, GASOLINE:DELIVERY:HOSES, LINES/PIPING, AND FITTINGS

FUEL SYSTEM, GASOLINE:STORAGE

FUEL SYSTEM, GASOLINE:STORAGE:TANK ASSEMBLY

FUEL SYSTEM, GASOLINE:STORAGE:TANK ASSEMBLY:FILLER PIPE AND CAP

Date Investigation Opened : August 23, 2010

Date Investigation Closed : June 14, 2012

Summary:

NHTSA has conducted extensive analysis of the data regarding fuel tank integrity for the model year (MY) 1993-2004 Jeep Grand Cherokee (JGC). As a result of that work, the agency has decided to upgrade its safety defect investigation to an Engineering Analysis and to expand the scope of vehicles included in the investigation. NHTSA's assessment of the data collected during this investigation indicates that rear-impact-related tank failures and vehicle fires are more prevalent in the JGC than in the non-Jeep peer vehicles. In addition, the agency's analysis of its FARS data for the peer vehicles and three Jeep models shows a higher incidence of rear-impact, fatal fire crashes for the Jeep products. PE10-031 had focused on the fuel tank system integrity of the JGC vehicles during rear-end collisions and impacts. The fuel tank is located at the rear of the vehicle, between the bumper and axle, and is manufactured from a plastic material (HDPE). Three peer vehicles (across the same MY range as the JGC) were identified for comparative assessment: the Chevrolet Blazer, Ford Explorer, and Toyota 4Runner. ODI has collected and assessed a significant volume of data for the JGC and three peer vehicles under the Defect Petition (DP) 09-005 and PE10-031, much of which was either provided by the petitioner or by the subject and peer manufacturers in response to ODI's information request letters. NHTSA has also utilized its FARS database. Fatal crash data was collected for the JGC and its three peers, along with data for two other Jeep vehicles, the Cherokee and Liberty, which were also manufactured with rear mounted fuel tanks and assessed by ODI as Jeep peer vehicles. Based on the agency's current analysis, ODI is upgrading its investigation to determine whether the subject vehicles contain a defect that presents an unreasonable risk to safety. The subject vehicles for EA12-005 will be MY 1993-2004 JGC, MY 1993-2001 Cherokee, and MY 2002-2007 Liberty; the estimated production volumes for these vehicles is approximately 5.1 million, although attrition is a factor for the older vehicles. Please note that the counts shown in the above failure report summary are for the JGC only (values shown in the total column are unique). Data for the other Jeep models and possibly other peer models will be collected during the investigation. The ODI reports cited above can be reviewed online at www-odi.nhtsa.dot.gov/complaints under the following identification (ODI) numbers: 506249, 549376, 734783, 869217, 10009553, 10335943, 10351589, 10351980, 10357528.

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U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 10-031
Date Opened: 08/23/2010
Investigator: Lawrence Hershman **Reviewer:** Scott Yon
Approver: Richard Boyd
Subject: Crash Related Fuel Tank Fires

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: CHRYSLER GROUP LLC
Products: 1993-2004 Jeep Grand Cherokee
Population: 3,037,000 (Estimated)
Problem Description: FUEL TANK PRESENTS FIRE HAZARD IN CRASHES.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	12	TBD	TBD
Crashes/Fires:	12	TBD	TBD
Injury Incidents:	5	TBD	TBD
Number of Injuries:	9	TBD	TBD
Fatality Incidents:	1	TBD	TBD
Number of Fatalities:	1	TBD	TBD
Other*:	10	TBD	TBD

*Description of Other: FARS fatal rear-impact crashes where fire is the MHE, resulting in 13 occupant deaths.

ACTION / SUMMARY INFORMATION

Action: Open a Preliminary Evaluation.

Summary:

In a letter dated October 2, 2009, the Center for Auto Safety (CAS) petitioned NHTSA to open a defect investigation and recall model year 1993-2004 Jeep Grand Cherokees. CAS alleged that the subject vehicles have defective fuel tank storage systems that present a fire hazard in crashes.

CAS alleged that the plastic fuel tank's placement behind the rear axle and below the rear bumper, and the lack of adequate shielding, make it more vulnerable to rupture or leakage from a rear-impact by another vehicle (including damage from other components located on the Grand Cherokee), or in the case of rollover crashes, from other external objects. CAS also alleged that the fuel filler neck tears off in crashes. In its petition, CAS cites data from NHTSA's Fatality Analysis Reporting System (FARS) showing 172 fatal fire crashes with 254 fatalities involving the subject vehicles from calendar years 1992 through 2008. CAS stated that there have been at least 44 crashes with 64 total fatalities (subject and non-subject vehicles) where fire was entered as the Most Harmful Event (MHE) in the FARS database.

In response to the CAS petition, ODI conducted a preliminary examination of available data. FARS data showed 2,988 occupants of the subject vehicles have died in crashes since 1992. Of those, 55 died in 44 crashes where fire was listed as the Most Harmful Event. Identifying crashes most likely associated with the alleged defect as described by CAS (defined as the subject vehicle being struck at the 5, 6 or 7 o'clock positions) isolated 10 crashes with 13 occupant fatalities. ODI also reviewed the Vehicle Owner Questionnaires (VOQ) database and identified 12 reports alleging A) a post-crash fuel tank leak and/or B) a post-crash fire potentially related to a fuel tank leak. Of the 12 reports, 10 involved fires (two involved fuel leaks only) with 9 alleged injuries and 1 alleged fatality. The existence of these post-crash fires does not, by itself, establish a defect trend. Further review and investigation into these

incidents is needed to determine the existence of any relationship between the alleged defect and each fire or leak. It should be noted that ODI also conducted a preliminary review of the Early Warning Reporting (EWR) data that did not find the subject vehicles to be over-represented for post-crash fires.

ODI has granted the petition to further investigate the conditions associated with post-crash fires in these vehicles.


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Report Date : March 14, 2013 at *04:23 PM*

NHTSA Action Number : DP09005

NHTSA Action Number : **DP09005**

NHTSA Recall Campaign Number : N/A

Vehicle Make / Model:

JEEP / GRAND CHEROKEE

Model Year(s):

1993-2004

Manufacturer(s) :

Chrysler Group LLC

Component(s) :

FUEL SYSTEM, GASOLINE:DELIVERY:HOSES, LINES/PIPING, AND FITTINGS

FUEL SYSTEM, GASOLINE:STORAGE

FUEL SYSTEM, GASOLINE:STORAGE:TANK ASSEMBLY

FUEL SYSTEM, GASOLINE:STORAGE:TANK ASSEMBLY:FILLER PIPE AND CAP

Date Investigation Opened : November 6, 2009

Date Investigation Closed : August 23, 2010

Summary:

In a letter dated October 2, 2009, the Center for Auto Safety (CAS) petitioned NHTSA to open a defect investigation and recall model year 1993-2004 Jeep Grand Cherokees. CAS alleged that the subject vehicles have defective fuel tank storage systems that present a fire hazard in crashes. CAS alleged that the plastic fuel tank's placement behind the rear axle and below the rear bumper, and the lack of adequate shielding, make it more vulnerable to rupture or leakage from a rear-impact by another vehicle (including damage from other components located on the Grand Cherokee), or in the case of rollover crashes, from other external objects. CAS also alleged that the fuel filler neck tears off in crashes. In its petition, CAS cites data from NHTSA's Fatality Analysis Reporting System (FARS) showing 172 fatal fire crashes with 254 fatalities involving the subject vehicles from calendar years 1992 through 2008. CAS stated that there have been at least 44 crashes with 64 total fatalities (subject and non-subject vehicles) where fire was entered as the Most Harmful Event (MHE) in the FARS database. In response to the CAS petition, ODI made a preliminary examination of available data. FARS data showed 2,988 occupants of the subject vehicles have died in crashes since 1992. Of those, 55 died in 44 crashes where fire was listed as the Most Harmful Event. Identifying crashes most likely associated with the alleged defect as described by CAS (defined as the subject vehicle being struck at the 5, 6 or 7 o'clock positions) isolated 10 crashes with 13 occupant fatalities. ODI also reviewed the Vehicle Owner Questionnaires (VOQ) database and identified 12 reports alleging A) a post-crash fuel tank leak and/or B) a post-crash fire potentially related to a fuel tank leak. Of the 12 reports, 10 involved fires (two involved fuel leaks only) with 9 alleged injuries and 1 alleged fatality. The existence of these post-crash fires does not, by itself, establish a defect trend. Further review and investigation into these incidents is needed to determine the existence of any relationship between the alleged defect and each fire or leak. It should be noted that ODI also conducted a preliminary review of the Early Warning Reporting (EWR) data that did not find the subject vehicles to be over-represented for post-crash fires. ODI's initial review neither supports nor excludes the possibility that a defect exists in the subject vehicles. However, ODI has always taken the position that vehicle fires pose a significant safety risk. Accordingly, ODI has granted the petition to further investigate the conditions associated with post-crash fires in these vehicles.

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