



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 11-023
Date Opened: 08/02/2011
Investigator: Kerrin Bressant
Approver: Frank Borris
Subject: Diesel Fuel Injector Line Leakage

Date Closed: 12/02/2011
Reviewer: Jeff Quandt

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: VOLKSWAGEN OF AMERICA, INC
Products: 2009-2012 VW Jetta, Jetta Sportwagen, Golf and Audi A3 TDI
Population: 168,275 (Estimated)

Problem Description: Fuel injector lines may crack and leak.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	23	96	106**
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0
Other*:	0	434	434

*Description of Other: Warranty Claims

** Count indicates duplicate reports received by ODI and manufacturer.

ACTION / SUMMARY INFORMATION

Action: This Preliminary Evaluation has been closed. Recall 11V-490.

Summary:

By letter dated October 3, 2011, Volkswagen Group of America, Inc. (VW) notified the National Highway Traffic Safety Administration (NHTSA) that it will conduct a safety recall to address a defect in approximately 168,275 model year (MY) 2009-2012 Volkswagen Jetta, Jetta Sportwagen, Golf, and Audi A3 vehicles equipped with the 2.0L TDI Common Rail Clean Diesel engine (NHTSA Recall No. 11V-490). The recalled Jetta and Jetta Sportwagen vehicles were built from May 2008 through September 2011, the Golf vehicles were built from May 2009 through September 2011, and the Audi A3 vehicles were built from September 2009 through September 2011.

According to Volkswagen, in U.S. applications of the above cited TDI vehicles including engine codes CJAA and CBEA, the fuel injection pulses could coincide with the natural frequency of the injector line #2 in specific load and RPM conditions. This resonance creates additional stress on the fuel line which a small number of parts (based on the statistic spread of line strength) cannot withstand over its lifetime. As a contributing factor, VW indicated that a supplier used tube material with scratch marks from a grinding process during certain production periods. Lines manufactured in these periods were installed in vehicles produced in the following 10 months: December 2008, January-February 2009, October 2009, March-April 2010 and September-December 2010. Injector lines using this material exhibit a significantly higher failure rate. Dealers will replace injector line #2 in all vehicles built in these months. In addition, as a precautionary measure, all recalled vehicles will have vibration dampers installed on all four fuel injector lines.

Analysis of NHTSA complaints, VW complaints, VW field reports and warranty claims found allegations of injector line leakage in 443 subject vehicles. The leaking line was not identified in 62 of the vehicles. For the 381 that did provide information about which injector lines were leaking and/or replaced, 358 (94%) involved an injector line #2 leak/repair. Almost three-quarters of the injector line #2 leak/repair incident vehicles were built in the 10 months identified by VW, which accounted for approximately one-quarter of the recalled vehicles. The failure rate for injector

line #2 in vehicles built in the 10 months affected by the supplier line scratching issue is 6.0 incidents per thousand vehicles (IPTV). The failure rate for injector line #2 in other production months of recalled vehicles is 0.8 IPTV. The leak/repair rates for the other injector lines are all well under 1 IPTV.

The action taken by Volkswagen is sufficient to resolve the issues raised by this investigation. The agency will continue to monitor this issue and reserves the right to take further action if warranted by the circumstances. Accordingly, this investigation is closed.