



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** EA 11-003  
**Prompted by:** PE10-034  
**Date Opened:** 02/07/2011  
**Investigator:** Kerrin Bressant  
**Approver:** Frank Borris  
**Subject:** High-Pressure Fuel Pump Failure

**Date Closed:** 03/27/2015  
**Reviewer:** Jeff Quandt

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** Volkswagen Group of America, Inc.  
**Products:** 2009-2012 Jetta, Golf, Touareg, A3 and Q7 TDI clean diesel  
**Population:** 241,279

**Problem Description:** Failure of the high-pressure fuel pump (HPFP) drivetrain causes contamination of the fuel system with debris from pump wear, which results in rough engine, loss of power and possible engine stall.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	178	562	713**
<b>Crashes/Fires:</b>	0	0	0
<b>Injury Incidents:</b>	0	0	0
<b>Fatality Incidents:</b>	0	0	0

\*\* Total eliminates duplicates received by ODI and manufacturer.

## ACTION / SUMMARY INFORMATION

**Action:** This Engineering Analysis has been closed.

### Summary:

The Office of Defects Investigation (ODI) opened EA11-003 on February 7, 2011, based on 160 complaints to ODI and Volkswagen involving high pressure fuel pump (HPFP) failures in model year (MY) 2009 through 2010 Volkswagen Jetta and Golf and Audi A3 TDI vehicles and questions regarding fuel sample results provided by Volkswagen as part of its response to PE10-034. During EA11-003, ODI analyzed design information, field experience and test data for MY 2009 through 2012 Volkswagen Jetta, Golf and Touareg and Audi A3 and Q7 vehicles equipped with TDI engines.

Volkswagen has not identified any design or manufacturing defects in the subject TDI Clean Diesel pumps and has stated that the subject pumps were designed, tested and approved for use in the United States market, with substantial design margins for fuels that are out of specification. Volkswagen believes that misfueling with gasoline is the primary cause of HPFP drivetrain failures in the field. Only the Q7 vehicles were built with misfuel protection devices. In May 2013 Volkswagen initiated a service campaign to install misfuel protection devices in all MY 2009 through 2012 Jetta, Golf and A3 vehicles. Volkswagen implemented misfuel protection devices in all of the subject models beginning in MY 2013.

ODI's analysis of HPFP drivetrain failure incidents indicates that most failures do not result in engine stall while driving and, when pump drivetrain failure does result in stall while driving, it is usually preceded by numerous warning symptoms (e.g., glow plug warning lamp, chime, limp mode, and driveability symptoms). The failure data for the subject vehicles show relatively low stalling rates (less than one percent at three years in service) for each of the pump designs used in the subject vehicles. There have been no reports of crashes, injuries or fatalities related to the alleged defect.

Based on these facts, this investigation is closed. The closing of this investigation does not constitute a finding by

NHTSA that a safety-related defect does not exist. The agency will continue to monitor complaints and other information relating to the alleged defect in the subject vehicles and take further action in the future if warranted. For additional information, see the closing report in the document file for EA11-003.

ODI complaint Vehicle Owner Questionnaires (VOQs) associated with EA closing resume: 10297692, 10315932, 10336472, 10342964, 10354074, 10354174, 10354353, 10354413, 10355102, 10356900, 10357404, 10357996, 10358817, 10358847, 10359338, 10360745, 10362795, 10363419, 10363955, 10364550, 10365805, 10367084, 10373155, 10376723, 10378743, 10379500, 10380120, 10381048, 10382949, 10383163, 10383283, 10383321, 10383398, 10383516, 10383749, 10383830, 10384051, 10384054, 10384417, 10390013, 10393204, 10393533, 10394943, 10395792, 10397516, 10397916, 10399150, 10400930, 10402131, 10402378, 10405460, 10405634, 10406793, 10407044, 10408838, 10408862, 10408881, 10410717, 10412275, 10415372, 10415850, 10416301, 10416485, 10417068, 10417118, 10417207, 10417930, 10418020, 10418029, 10418074, 10418189, 10420245, 10420779, 10420805, 10420825, 10422735, 10423829, 10424547, 10427027, 10427041, 10427104, 10428322, 10428406, 10428685, 10430279, 10430767, 10432978, 10433474, 10433548, 10433707, 10433959, 10435310, 10435445, 10436860, 10437653, 10439127, 10440574, 10440633, 10441240, 10441345, 10441452, 10444474, 10445264, 10445533, 10446661, 10448129, 10449335, 10451153, 10451720, 10451962, 10453188, 10454194, 10455353, 10457020, 10457084, 10457208, 10458195, 10458595, 10458880, 10458937, 10459131, 10459301, 10459560, 10460725, 10461423, 10464327, 10465844, 10467147, 10467180, 10467739, 10467966, 10468393, 10468746, 10468962, 10469145, 10469906, 10470322, 10470421, 10470560, 10470715, 10471754, 10471795, 10472772, 10472821, 10472935, 10473199, 10473647, 10474344, 10475718, 10475900, 10476504, 10476657, 10476847, 10477104, 10477176, 10477244, 10478122, 10478839, 10478847, 10479279, 10479817, 10479855, 10480708, 10480735, 10480946, 10480997, 10482361, 10482481, 10482572, 10482623, 10483669, 10484561, 10484807, 10485541, 10490428, 10599003, 10627907, 10663550