



U.S. Department  
of Transportation  
**National Highway  
Traffic Safety  
Administration**

## ODI RESUME

Investigation: PE08-063  
Date Opened: 10/31/2008  
Principal Investigator: Peter Ong  
Date Closed: 02/27/2009  
Subject: Compressed Natural Gas (CNG) Regulator Leak

Manufacturer: Ford Motor Company  
Products: 2003-2004 Ford F-150 Dual Fuel Natural Gas Vehicles (NGV)  
Population: 1,320

Problem Description: Venting and leakage of natural gas from the vehicle natural gas fuel pressure regulator.

### FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	4	11	15
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
# Injuries:	0	0	0
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	0	100	100

\*Description of Other: Warranty claims related to issue within first 36 months of service.

Action: Close this Preliminary Evaluation.

Engineer: Peter Ong

Date: 02/27/2009

Div. Chief: Thomas Z. Cooper *TZC*

Date: 02/27/2009

Office Dir.: Kathleen C. DeMeter

Date: 02/27/2009

### Summary:

The Agency has closed this investigation based on its review of complaint reports, discussions with complainants and field and technical data provided by Ford.

The subject vehicles are 1/2 ton pickup trucks and are natural gas vehicles (NGV) that are fueled by gasoline or compressed natural gas. The Agency has received reports alleging improper operation of the natural gas fuel pressure regulator allowing release of excess amounts of natural gas into the engine compartment. Ford reports that the regulator contains an over pressure relief valve that will vent natural gas should the pressure exceed a set threshold. The complaint reports and data reviewed by the agency indicate that an improperly operating pressure regulator can result in an overpressure condition and activate the regulator pressure relief valve. The released natural gas is directed through a vent hose that discharges the natural gas in the vicinity of the right front wheel house and away from the engine compartment's extremely hot areas/surfaces.

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Owners are normally aware of this problem by the presence of an illuminated warning light inside the vehicle, odor of natural gas or the sound of venting gas. When the operator turns the engine off, the natural gas supply tank solenoid will close and the regulator will not release natural gas. At vehicle restart, the solenoid valve will remain closed to prevent leakage and the vehicle will only operate in the gasoline mode.

A safety-related defect 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 a safety-related defect does not exist. The agency will monitor this issue and reserves the right to take further action if warranted by the circumstances.