



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: EA07-011
Date Opened: 08/14/2007
Principal Investigator: Derek Rinehardt
Subject: Engine Compartment Fire

Manufacturer: BMW of North America, LLC. Bayerische Motoren Werke
Products: MY 2002 – 2003 Mini Cooper
Population: 50,000 (estimated)

Problem Description: Allegations of fire or smoke from the electro-hydraulic power-steering system.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	10	12	32
Crashes/Fires:	5	3	8
Injury Incidents:	0	0	0
# Injuries:	0	0	0
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	0	91	91

*Description Of Other: Warranty claims of thermal failure of power steering.

Action: An Engineering Analysis has been opened.

Engineer: Derek Rinehardt

Date: 08/14/2007

Div. Chief: Jeffrey L. Quandt *JLQ*

Date: 08/14/2007

Office Dir.: Kathleen C. DeMeter

Date: 08/14/2007

Summary: In response to an information request letter sent by the Office of Defects Investigation (ODI), BMW stated that the cause of the alleged defect is an insufficient seal of the ground cable of the power steering pump at its attachment to the chassis. Water ingress can occur and the water can travel along the power steering pump power cable and come in contact with the power steering pump power cable connector. The connector can then corrode and a high thermal load condition can occur. According to BMW, this ultimately could result in a localized smoldering condition that does not propagate.

To correct the water ingress issue, BMW implemented changes to the wire routing, the power steering pump connector and the ground eyelet connection between February and July of 2002. In a review of warranty claim data sent by BMW, 67 percent of the vehicles noted in warranty claims had production dates after August 1, 2002. Additionally, ODI noted eight reports of consumers witnessing flames coming from the engine compartment.

The Preliminary Evaluation (PE07-022) has been upgraded to an Engineering Analysis to further assess the scope, frequency and potential safety consequences associated with the alleged defect.