



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

OFFICE OF DEFECTS INVESTIGATION

NHTSA

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Investigation: EA 19-003
Prompted by: PE19-002
Date Opened: 10/11/2019
Investigator: Peter Kivett **Reviewer:** Bruce York-B
Approver: Stephen Ridella
Subject: Steering Oscillation

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: BMW of North America, LLC
Products: 2018-2019 K-1600
Population: 980

Problem Description: While riding at highway speeds or decelerating, the front handlebars may oscillate and shake violently causing the operator/rider to lose control of the bike potentially resulting in injury or death.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	12	20	20**
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0
Other*:	0	15	15

*Description of Other: BMW field reports

** Total eliminates duplicates received by ODI and manufacturer.

ACTION / SUMMARY INFORMATION

Action: This Engineering Analysis (EA) is open.

Summary:

The Office of Defects Investigation (ODI) opened investigation PE19-002 on March 25, 2019. This investigation was opened based on six consumer complaints alleging 2018 and 2019 model year (MY) BMW K-1600 motorcycles were unstable at highway speeds and that the instability was exacerbated while in traffic. ODI opened the PE to determine the severity and frequency associated with the alleged defect.

In response to an ODI Information Request (IR) letter, BMW submitted a total of 20 complaints, 15 field reports and 5 warranty claims. Although the subject vehicles of the investigation include 2018 and 2019 model years, all the complaints, warranty and field reports submitted by BMW were on the 2018 MY bikes. BMW stated in its response that it did not have any complaints, warranty or field reports for the 2019 MY K-1600 series. Since opening the PE, ODI has received an additional six consumer complaints related to this investigation.

In July 2019, ODI met with BMW at its New Jersey facility to see a presentation and then follow (in a trailing vehicle) a BMW rider on a subject bike. The purpose of the trailing exercise was to observe how the motorcycle handled on various road types and traffic conditions. During this demonstration the ODI investigator witnessed some instability or wobble that was aggravated when passing large trucks. There were, however, no lane departures experienced by the subject vehicle's rider during the trailing event. The ODI investigator was unable to fully determine the safety impact of the observed phenomena.

In addition to witnessing the BMW rider demonstration in New Jersey, ODI interviewed complainants who allege their bikes felt unsafe and were dangerous above 55 mph. To better understand the safety impact described by consumers and quantifiably measure the level of instability experienced, ODI has decided to upgrade the investigation to an Engineering Analysis (EA).

As part of the EA, ODI will conduct an analysis of the subject motorcycle's geometry, suspension and other characteristics as well as conduct stability testing. ODI will have the subject motorcycle tested at the NHTSA's Vehicle Research Testing Center (VRTC) under controlled conditions to both quantifiably and subjectively measure the subject motorcycle's stability. VRTC will obtain the subject vehicle(s) for evaluation and testing. These tests will be performed by professional riders to learn if they experience riding discomfort they feel is unsafe and gauge if the wobble condition presents a safety concern.

This Engineering Analysis has been opened to examine and better understand the severity of the alleged defect.

The ODI reports cited above can be reviewed at:

<http://www-odi.nhtsa.dot.gov/owners/SearchNHTSAID>
using the following complaint identification numbers: 11098821, 11111044, 11111232, 11128491, 11149745, 11166420, 11191569, 11194573, 11208774, 11219239, 11246011, 11257720