U.S. Department of Transportation

National Highway Traffic Safety Administration

ODI RESUME

OFFICE OF DEFECTS INVESTIGATION
NHTSA
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Investigation: PE23014
Prompted By: VOQ Review
Date Opened: 07/28/2023 **Date Closed:** 02/05/2024
Investigator: Alexa Ardron **Reviewer:** Matthew Martens
Approver: Tanya Topka
Subject: Loss of steering control

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Tesla, Inc.
Products: 2023 Tesla Model 3 and Y
Population: 554,900 (Estimated)

Problem Description: Loss of steering control, frequently accompanied by driver-facing messages indicating that power steering assist is reduced or disabled

FAILURE REPORT SUMMARY

	ODI	Manufacturer	EWR D&I	Other	Total	EWR Field Reports
All Incidents:	124	2,264	0	0	2,388*	0
Crashes/Fires:	1	1	0	0	1*	0
Injury Incidents:	0	0	0	0	0	0
Number of Injuries:	0	0	0	0	0	0
Fatality Incidents:	0	0	0	0	0	0
Number of Fatalities:	0	0	0	0	0	0

Description of Other:

*Total eliminates duplicates received by the manufacturer

ACTION/SUMMARY INFORMATION

Action: This (PE) Preliminary Evaluation has been upgraded to an Engineering Analysis EA24-001.

Summary:

On July 28, 2023, The Office of Defects Investigation (ODI) opened a Preliminary Evaluation (PE23-014) after receiving 12 Vehicle Owner Questionnaires (VOQs) reporting loss of steering control in model years (MY) 2023 Tesla Model 3 and Y vehicles. During PE23-014, ODI interviewed complainants, sent an Information Request (IR) letter to Tesla, and convened technical meetings with Tesla that included a joint inspection of a crashed vehicle.

The investigation identified 2,388 total complaints regarding the alleged defect, including 124 complaints through VOQs and 2,264 complaints through manufacturer data. ODI is associating 1 crash to this investigation (11544655), where a driver was unable to complete a right hand turn in the intersection and hit a vehicle. This vehicle was subject to a joint inspection by ODI and Tesla. The steering rack was recovered by ODI with the consumer's permission.

ODI's interviews of allegations supplied to the agency, in the form of VOQs, identified patterns of the incoming complaint traffic. Complaints allege an inability to turn the steering wheel, while other complaints allege an increase in required effort to turn the steering wheel. These conditions were reported to occur during the drive cycle as well as at start-up. Approximately one-third of complaints with a reported speed occurred at vehicle start-up or speeds less than 5 mph. Interviews with failures reported at speeds over 5 mph, half reported an inability to turn the steering wheel. A majority of complaints with a reported speed reported between 5 mph and 35 mph with approximately 1 in 10 occurring on open roads at speeds 35 mph and over. The highest reported speed regarding an alleged inability to turn the steering wheel is 75 mph. A majority of allegations reported seeing a warning message, "Steering assist reduced", either before, during or after the loss of steering control. A portion of drivers described their steering begin to feel "notchy" or "clicky" either prior to or just after the incident.

There have been multiple allegations of drivers blocking intersections and/or roadways. ODI is aware of over 50 vehicles which were allegedly towed as a result of the condition from a variety of areas including, driveways, parking lots, side of road and intersections. Multiple complaints state they were able to temporarily remedy the condition by power cycling the vehicle, but the issue reoccurred until the steering rack was replaced.

Tesla supplied four steering rack part numbers on the subject vehicles. The investigation identified part numbers, 1044832-00-A and 1188832-00-A accounted for 2,187 of the complaints and 4 did not have original part number in the information request.

ODI has upgraded PE23-014 to an Engineering Analysis (EA24-001) due to continued complaint traffic and to characterize the system conditions leading to- and stemming from- the alleged defect in vehicles supplied with steering rack part numbers 1044832-00-A and 1188832-00-A

To review the ODI reports cited in the Closing Resume ODI Report Identification Number document, go to NHTSA.gov.