



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 20-020
Date Opened: 11/22/2020
Investigator: Matthew Martens **Reviewer:** Jeff Quandt
Approver: Stephen Ridella
Subject: Front Fore Link Failure

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Tesla, Inc.
Products: 2015-2017 Tesla Model S, 2016-2017 Model X
Population: 114,761 (Estimated)
Problem Description: The front suspension fore links may fail at the knuckle ball joint ring, which may result in contact between the tire and wheel liner.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	43	TBD	TBD
Crashes/Fires:	0	TBD	TBD
Injury Incidents:	0	TBD	TBD
Number of Injuries:	0	TBD	TBD
Fatality Incidents:	0	TBD	TBD
Number of Fatalities:	0	TBD	TBD
Other*:	8	TBD	TBD

*Description of Other: Possible fore link failures.

ACTION / SUMMARY INFORMATION

Action: A Preliminary Evaluation has been opened.

Summary:

NHTSA's Office of Defects Investigation (ODI) has received 43 complaints alleging failure of the left or right front suspension fore links in Tesla model year (MY) 2015 through 2017 Model S and MY 2016 through 2017 Model X vehicles. Thirty-two (32) of the complaints involve failures that occurred during low-speed parking maneuvers (e.g., backing from driveway or parking space at speeds below 10 mph). Eleven (11) incidents occurred while driving (e.g., incidents on roadways at speeds above 10 mph), including four at highway speeds. The complaints appear to indicate an increasing trend, with 34 complaints received in the last two years and three of the incidents at highway speeds reported within the last three months. In addition, ODI has identified eight complaints that may involve front fore link failure, but have not been confirmed by repair records or photographs. The potential fore link failures were all reported in the last two years and include two incidents that occurred while driving.

On February 10, 2017, Tesla released a service bulletin (SB-17-31-001, "Replace Front Suspension Lower Fore Links") describing a manufacturing condition that may result in fore link failure. The bulletin describes the condition as follows: "Some Model S and Model X vehicles may have been manufactured with front suspension fore links that may not meet Tesla strength specifications. In the event of link failure, the driver can still maintain control of the vehicle but the tire may contact the wheel arch liner." The bulletin indicates that affected vehicles were "built between approximately January 19, 2016 and May 25, 2016." The complaints cited above include 41 vehicles built before (12) or after (29) the bulletin build range.

The Office of Defects Investigation has opened this Preliminary Evaluation to evaluate the scope, frequency and

consequences of the alleged defect.

The reports cited above can be reviewed at NHTSA.gov under the following reference numbers: 11375236, 11374374, 11373580, 11373079, 11372979, 11372667, 11366414, 11360383, 11352228, 11351962, 11348941, 11343889, 11341996, 11341133, 11323803, 11323290, 11310679, 11289356, 11288480, 11270612, 11255176, 11253305, 11243782, 11243469, 11240524, 11235055, 11233752, 11228269, 11220932, 11220236, 11210000, 11197184, 11194559, 11194264, 11152089, 11120467, 11110981, 11075754, 11013497, 11013046, 10924050, 10898994, 10875120.

Possible fore link failures: 11366291, 11323577, 11280758, 11265885, 11253577, 11244971, 11205681, 11121921.